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A HANDBOOK OF CHINA PROPER

VOLUME I

GENERAL

1918

NAVAL STAFF
INTELLIGENCE DIVISION

NOTE

THE aim of this volume is to give a general introduction to the past and present condition of the territories comprised in the term China Proper. These territories are large and diverse, their peoples have a long history, and it has only been possible, in the limits, to deal with the subjects of special importance in short and condensed surveys. Most of the chapters have been written by recognized authorities. Every effort has been made to bring the information up to date, but it must be borne in mind that the government and social structure of China are at present, and have been for some years, in a state of change, and that, under present conditions, no description of these can hold good for any length of time. The Admiralty will be glad to receive additions or corrections.

The map issued with this volume was prepared for the use of the China Inland Mission, and is on the whole the best available for general purposes. The place-names are given in accordance with the romanization adopted by the Chinese Post Office. When the Post Office lists do not contain a name, the compilers of the map have evidently adopted a spelling based on the Post Office system. It follows that there will be some differences between the map and the text in the case of names which do not occur in the Post Office lists, for these, according to the spelling adopted by the Admiralty, are transliterated in this volume after Sir Thomas Wade's system. The map's chief defect is that no relief is shown, and errors exist in the topography and place-names.

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MAP

CHINA (prepared for the China Inland Mission, 1916). In two sheets.

CHAPTER I

PHYSICAL GEOGRAPHY

Structure and Configuration—The Great Plain—The Northern Uplands—The Southern Uplands—The Coast.

Structure and Configuration

China Proper consists of an extensive plain completely surrounded, except towards the sea, by still more extensive uplands. Owing to differences in character and structure the uplands may be conveniently divided into a northern section and a southern section, the boundary between the two lying about the Wei Ho, a tributary of the Huang Ho.

Three main regions may accordingly be recognized, namely (1) the Great Plain, (2) the Northern Uplands, (3) the Southern Uplands.

Of these three divisions the Southern Upland region is by far the most extensive, constituting about two-thirds of the whole country ; the Northern Uplands form about one-sixth, and the Great Plain occupies the remaining sixth.

Broadly speaking, it may be said that the Great Plain forms most of the north-eastern quadrant, the Northern Uplands most of the north-western quadrant, while the Southern Uplands occupy the whole of the southern quadrants, and spread beyond into both of the northern quadrants.

The simplicity of this arrangement, however, is somewhat interfered with by the presence of one or two detached masses of the Northern Uplands which rise up through the low land of the Plain.

The Great Plain

The Great Plain is roughly triangular in shape, with its apex in the north, a little beyond Peking, and its base on the Yangtse River, extending from Shanghai to the neighbour-

hood of Ichang. Near Peking it is about a hundred and twenty miles wide, on the Yangtse its width is more than six hundred miles.

But the plain is not entirely unbroken. In the province of Shantung a mass of ancient rock rises through the alluvial deposits of the plain and forms two isolated hilly groups, separated by a strip of low-lying ground. The western group lies in the interior of the province, and reaches an altitude of about 5,000 ft. The eastern group forms the prominent peninsula of Shantung, with Weihaiwei upon its northern coast, and Tsingtau upon its south. The bay of Kiaochow is cut in the intervening low-lying strip. Geologically the Shantung hills belong to the Northern Uplands, but they are entirely detached from the main mass, which lies to the west of the Plain.

Farther south an irregular series of hills, known as the Huai mountains, runs obliquely across the Plain, almost completely cutting off the south-western corner from the rest. In this corner stand Hankow and Shasi. The Huai mountains belong geologically to the Southern Uplands.

The Plain itself is in general very level, and a great part of it lies very low. In the north it is watered by the Huang Ho and by a number of shorter rivers, such as the Pei Ho, coming down from the Northern Uplands. In the south the principal rivers are the Yangtse, with its northern tributary the Han Kiang, and the Huai Ho with its tributary the Sha Ho.

The Plain is really the combined deltas of all these rivers, and is formed almost entirely of the mud and silt which they have brought down from the Uplands. The Huang Ho has had by far the largest share in its formation.

In its course over the Northern Uplands the Huang Ho cuts its way through widespread deposits of the soft ' yellow earth ' or loess which is characteristic of that region, and will be described later. It is, in consequence, a very muddy river, and probably carries down a greater amount of silt than any other river of the globe, except, perhaps, the Amazon. When it overflows it raises its banks by deposition at the edge

of the current; during the dry season it raises its bed by deposition in its channel. In many parts of the Plain, accordingly, the river is now considerably above the level of the surrounding country, like the rivers of our own Fen district. The natural embankments which the river itself has formed, have been artificially strengthened; but during the floods the force of the current is often so great that the embankments burst. On many occasions hundreds of square miles have been flooded, and many thousands of the inhabitants drowned. In the floods of 1887 more than a million people lost their lives.

When the embankment breaks it may be easier for the current to escape through the breach than to keep to its old channel; and consequently the great floods have often been accompanied by a complete change in the course of the river below the breach. In modern times the greatest change of this kind occurred about the middle of last century.

During the first half of the century the river flowed in an east-south-easterly direction from Kaifeng, and entered the Yellow Sea in 34° N.L. In 1851, owing to want of repairs during the political disturbances of that period, the embankment gave way a few miles below Kaifeng. The floods of the following years enlarged the breach, and by 1853 practically the entire river had taken a north-easterly course to the Gulf of Pechili, which it reached in lat. 37° 50′ N.

The distance from the old mouth to the new one was about 280 miles, and Kaifeng is more than 300 miles from both. Since then there have been many changes of the same kind, but of smaller magnitude, and the position of the main mouth has frequently been altered.

The disastrous floods of Northern China, however, are not all due to the Huang Ho. The Pei Ho and other rivers of the north come from the Northern Uplands, and are almost as muddy as the Huang Ho. They tend to raise their channels above the surrounding country in the same way, and accordingly (though small in comparison with the Huang Ho) they have not uncommonly been the cause of extensive inundations.

In the southern part of the Plain the floods, though by

no means inconsiderable, have never been so widespread or destructive as those of the north. The Yangtse flows through the Southern Uplands, where there is but little loess, and its course till it reaches the Plain is mostly over hard rock. In consequence of this, although it is a much larger river than the Huang Ho, it does not bring down so much sediment and has not the same tendency to raise its bed. For the same reason it has not yet had time to produce so smooth and even a delta. There are still extensive lagoons beside its course which it has not yet been able to silt up, and these lagoons extend at intervals up the river for nearly a thousand miles. One of the largest is the Tung-t'ing Lake between Ichang and Hankow. During the rains the flood-water escapes into the lagoons, which spread far beyond their dry-season limits; but the greater part of the Plain is left untouched. The lagoons, in fact, serve as reservoirs to regulate the flow of the water.

The Northern Uplands

The Northern Uplands form a plateau descending abruptly in a series of steps to the Plain. The edge of the plateau is cut up by the rivers which flow down to the Plain, and its surface is also deeply scored by river valleys, the largest and most important of which are those of the Huang Ho and its tributary the Fên Ho. The solid foundation consists of nearly horizontal beds of rock of Carboniferous and pre-Carboniferous age, and it is to the horizontality of the strata that the general form is due. But large areas are covered by 'yellow earth' or loess, and the region owes much of its peculiar character to this covering.

The loess is a calcareous loam, very fine in texture, sufficiently consolidated to form vertical cliffs, but friable and easily worn by running water. In consequence of this the rivers often flow in deep and narrow gorges. Even the regular trade routes are often sunk thirty feet or more beneath the general level. Under the feet of travellers and the hoofs of

their pack animals, the loess is trodden into a fine dust, and in this condition it is easily blown away. Where it is untrodden it is comparatively firm, and is much less affected by the wind.

Everywhere the loess is penetrated by innumerable vertical tubes of very small diameter. Owing to its tendency to split along these tubes the sides of the valleys are often almost perpendicular, or else they descend in a series of terraces with vertical scarps. On account of its tubular structure the loess is very porous, and accordingly the surface of the plateau is usually very dry. The rainfall is small and insufficient for so porous a soil, but wherever irrigation is possible the loess is extraordinarily fertile.

The Southern Uplands

The Southern Uplands are much more complex in structure and more varied in character than the Northern Uplands. The rocks which form them are not horizontal, but have been strongly crumpled or folded. The effect of the folding was to raise a series of mountain chains, which are, however, mostly of great age, and have accordingly been much worn down by rain and rivers. The structure has been further complicated by the fact that there have been several systems of folding of different directions and different geological ages.

Along the northern border of the Southern Uplands the folds trend from W. by N. to E. by S. The direction of the mountain ranges is the same, and it is evident that they owe their elevation directly to the folding, though subsequent denudation has greatly modified their form. This folding seems to have taken place at the close of the Carboniferous period.

Immediately to the south an entirely different system of folds prevails, and dominates the topography of the greater part of Southern China. It seems to belong to a somewhat later period, for beds which are newer than the Carboniferous have been affected. The general direction of the folds is about WSW. to ENE., becoming more easterly in the north

and more southerly towards the south. The ranges to which they gave rise cover a much wider area than the ranges of the northern border; but they do not seem ever to have attained so great an altitude, and since their formation they have been much worn down and are now completely broken up.

In the western part of the Southern Uplands a third, and much newer, system of folds enters from Tibet. The trend of these folds is from N. to S.; and because of their recent formation the ridges and valleys which they produced are still almost continuous.

Owing to these three systems of foldings, which are of different dates, and have been exposed to erosion for different periods of time, the details of the topography of Southern China are extraordinarily complex; and in order that they may be more easily grasped, certain broad general principles must first be briefly explained.

The direct effect of folding is to produce a series of nearly parallel ridges and valleys. Originally the main rivers will flow along these valleys, in the direction of the folds; but their tributaries will cut tributary valleys in the intervening ridges. At the head of every river there is erosion, due chiefly to rain and weather, and accordingly each river tends to eat into its own watershed, and to prolong its valley backwards. In course of time a tributary stream may work its way right through the watershed into the valley of a neighbouring river, and may even divert the water of that river into itself, and thence into the river to which the stream is tributary. In this way the original system of parallel ridges and valleys becomes complicated by cross connexions; and since, at the same time, all the valleys are gradually enlarged and all the ridges gradually worn away by various erosive agents, the former simple arrangement may be lost, and the whole area becomes a confused and apparently irregular series of hills and valleys.

With these simple principles borne in mind there is little difficulty in understanding the general character of the

different parts of the Southern Uplands. For purposes of description it will be convenient to recognize three divisions, according to the three systems of folding which predominate, and these divisions may be called :

(*a*) The Northern Border.
(*b*) The Western Division.
(*c*) The Eastern Division.

(*a*) *The Northern Border of the Southern Uplands.*—Here the direction of the folds is about W. by N. to E. by S., and the folding is of ancient date, though there may have been later movements along the same lines. The effect of the folding was to raise a series of lofty mountain ranges which reached so great an altitude that, in spite of their antiquity and the denudation from which they have suffered, they still retain much of their former continuity and the main ridges and valleys still follow the direction of the folds.

Many names have been applied to the different parts of this group of mountain ranges. In the tongue of China Proper which projects towards the north-west there is the Nan Shan. Immediately south of the Wei Ho lies the great range of the Tsin-ling Shan, reaching an altitude of 11,000 ft. At its eastern end the Tsin-ling Shan is separated by an oblique depression from the Fu-niu Shan and other smaller ranges ; but even in the depression the height of the watershed is about 4,000 ft., and the ranges to the east of it are really the continuation of the Tsin-ling Shan. The depression is due to a fault which slightly shifts the direction of the folds and of the mountain range itself ; and it is of considerable importance, because it affords an easy route across the mountains from Siangyangfu to Sianfu.

Another depression, of still lower altitude, through which runs the road from Siangyangfu to Kaifeng, separates the Fu-niu Shan from the Huai mountains, which form an irregular series of heights stretching towards Nanking.

Except in the Huai mountains, which are comparatively low, the main ridges and valleys still follow the original

direction due to the folding, and many of the rivers therefore still flow from west to east. This is the case, for example, with the Han Kiang until it reaches the Great Plain. But other tributaries of the Yangtse, such as the Kia-ling Kiang and the Min Kiang, have worked their way back across the folds and run almost due south. Outside the limits of China Proper it is probably owing to cross-cuts formed by tributary streams that the Huang Ho takes its present remarkably winding course through the K'un-lun ranges, which belong to the same system of folding. The Tao Ho, at the western end of the Tsin-ling Shan, is another river which has evidently suffered deflection. In its upper part it flows along one of the main valleys in an easterly direction ; but about a hundred and fifty miles from its source it turns abruptly towards the north, leaves its own valley, which is still continued eastwards, and breaks through the ridge on its northern side to join the Huang Ho. There can be little doubt that originally it continued its eastward course, but a tributary of the Huang Ho cut backwards through the watershed and captured its upper waters.

(*b*) *The Western Division of the Southern Uplands.*—In western Szechwan and Yunnan the folds run from N. to S., and since they are of recent date they have been comparatively little affected by erosion. Consequently this part of China consists almost entirely of a series of parallel ridges and valleys trending from N. to S. The valleys are V-shaped, their sides are steep, and there is very little level land even along the river-banks. Often, indeed, the rivers run in deep and narrow gorges. It is on the Tibetan border, where the Salween, the Mekong, and the Yangtse run side by side for many miles, separated by high and narrow ranges, that these features are most pronounced ; but the same general character prevails throughout the area.

Nevertheless even here some of the ridges have been cut through and some of the rivers have been deflected from their original courses. The Yangtse, for example, breaks across from one valley to another until at last it leaves the region of

the N. to S. folds altogether. In the present state of our knowledge it is not possible to trace in detail the changes which have taken place. But the general arrangement of the rivers and valleys strongly suggests that after the formation of the N. to S. folds the Upper Yangtse ran southwards much farther than it does now, and perhaps even reached the Gulf of Siam. The Lower Yangtse at that time rose on the outer or eastern border of this system of folding; but it gradually cut backwards, tapping the N. to S. valleys one after another, until at length it reached that of the Upper Yangtse itself.

Farther south the tributaries of the Irawadi and the Salween have worked their way back through the folds and have produced a series of valleys running from NE. to SW., which cut across the original N. to S. valleys and ridges.

(*c*) *The Eastern Division of the Southern Uplands.*—It is in this area that the destruction of the original mountain system has proceeded farthest, partly, perhaps, because it never reached so great an altitude as the others. The trend of the folds is WSW. to ENE. or SW. to NE.; but the region does not now consist of a series of parallel ridges and valleys following this direction. The old valleys have been greatly widened and the ridges much worn down; and tributary streams have cut transverse valleys through the ridges, which are now completely broken up. Nevertheless the short and discontinuous ranges that still remain commonly preserve the original SW. to NE. trend.

Some indication of the original valley system is also to be seen in the rivers which enter the Yangtse from the south. In spite of considerable irregularities the Kung-t'an Ho, the Yüan Kiang, the Hsiang Kiang, and the Kan Kiang still retain a general north-easterly course.

The drainage of the seaward edge of the region has found its way directly to the sea, and consequently near the coast there are a number of rivers which flow to the east or south-east. Most of them are short, but some (e. g. the Min Kiang, which enters the sea at Foochow) have cut back through the outer ranges of hills into the valleys beyond. In the northern

part of the area the large rivers flowing into the Yangtse have deepened their valleys to so great an extent that the coastal streams have not been able to tap them. But in the south, where the influence of drainage towards the Yangtse would naturally be less marked, one of these coastal streams has worked its way back across the folds into the heart of the country, has captured all the drainage of this part of the area, and has become one of the great rivers of China. This is the Si Kiang, which now rises on the borders of the N.–S. system of folds and which has cut its bed so deep that, in the lower part of its course, it has formed a long and narrow low-lying plain running far into the interior. It is upon the edge of this plain that the city of Canton stands.

But the peculiar features of this division of the Southern Uplands are not entirely due to folding and subsequent denudation. During some past geological period, when climatic and other conditions were different from those of the present day, the rivers were unable to carry their burden to the sea, and many of the depressions were either partly or completely filled by reddish sandy and argillaceous sediments. Sometimes indeed the deposit was so thick that the intervening ridges were partly buried, and a high-lying and somewhat uneven plain was formed, through which the summits of the buried ridges appear as low ranges of hills crossing the plain from SW. to NE. The soil formed by the red deposits is usually very fertile, and consequently these plains are amongst the most densely peopled parts of China.

The most important of these high-lying plains is that of eastern Szechwan, which on account of the colour of the soil is often called the Red Basin. It is in general a gently undulating region, with many low lines of hills running across it and with the rivers sometimes cut rather deeply into the red deposits that form it.

A considerable part of Eastern Yunnan is of the same character, and similar but smaller areas are common amongst the hills of this south-eastern part of China.

The Coast

The character of the Chinese coast is determined partly by the nature of the rocks which form it and partly by the movements of elevation and depression to which it has been subjected.

The shore of the Great Plain is naturally low, and the only openings of any importance are the mouths of the rivers. About lat. 40° N. the Northern Uplands come down to the sea, giving a steeper character to this part of the coast, which extends as far as the plain of the Liao Ho in the Manchurian province of Shengking.

The Shantung Peninsula, being made of ancient rock, rises abruptly from the sea, and has many rocky inlets, especially upon its southern side. The Bay of Kiaochow is cut in a strip of low-lying ground, but is flanked on both sides by hills.

The coast of the Southern Uplands, extending from Hangchow Bay southwards, is in general steep, with innumerable irregular inlets and outlying rocky islands. Evidently the land has subsided and the sea has spread up the valleys and completely cut off many of the outer hills. Where the valley was occupied by a river of considerable size the delta of the river has begun to fill up the inlet, producing a low-lying alluvial plain. But it is only in the case of the Si Kiang that the plain is of any great extent.

CHAPTER II

GEOLOGY

Structural Geology

In the Great Plain the solid rocks are entirely concealed by river deposits, but there is every reason to believe that the geological structure is similar to that of the neighbouring upland regions. Consequently, instead of the three main regions already described, it is more convenient from the geological point of view to recognize only two primary divisions, a northern and a southern.

In the northern division, which includes the Northern Uplands and the greater part of the Plain, only the Archaean rocks as a rule are much affected by folding. In some places indeed the later beds have been greatly disturbed and even show over-folding and over-thrusting. But throughout a great part of northern China even the Cambrian beds are almost horizontal or are simply bent into comparatively gentle undulations. This is the case, not only in the plateaux of the north-west but also in the peninsulas of Liaotung and Shantung. Evidently this northern area as a whole has remained rigid since Archaean times. But although it was too rigid to crumple it has not been strong enough to resist fracture, and faulting has taken place on an extensive scale. Some of the fractured blocks have remained standing, while others have fallen to a lower level. The plateau region of the north-west and the peninsulas of Liaotung and Shantung are upstanding blocks, while the Gulf of Pechili, the Yellow Sea, and the Great Plain mark the positions of blocks which have sunk beneath the sea. The Great Plain itself has been formed by the silting up of the sea by the deposits brought down by the rivers.

In South China, on the other hand, folding is much more general. Along the northern margin of the Southern Uplands the direction of the folds, as already pointed out, is about W. by N. to E. by S. These folds affect the Carboniferous rocks and were probably formed about the close of the Carboniferous period.

But throughout the greater part of the Southern Uplands the folds trend from WSW. to ENE., curving round a little more to the east in the northern part of the area and to the south in the southern part. Not only the Carboniferous but also the later beds are affected, and the folding must therefore be of Post-Carboniferous age.

In the west of the Southern Uplands, where the mountain ranges run from north to south, the folding is of still later date, and probably belongs to the Tertiary period.

Stratigraphical Geology

One of the most interesting features in the geological history of China Proper is the length of time during which the country has been land. A large part of the Plain no doubt has been beneath the sea in comparatively recent times; but throughout the greater part of the upland regions the Mesozoic and Tertiary deposits are entirely of freshwater or terrestrial origin. It is only in the south-west that any marine deposits of later age than the Permian have been found. In general it may be said that the Palaeozoic formations of China are mostly marine, and the Mesozoic and Tertiary formations mostly freshwater or terrestrial.

Again, as in the case of geological structure, there are important differences between the northern and the southern regions.

In northern China the Archaean rocks are overlaid by a great series of sandstones, quartzites, and limestones which belong to the Cambrian and Ordovician systems. There are no representatives of the Silurian, Devonian, or Lower Carboniferous beds of Europe; but the Ordovician beds are followed immediately by a series of limestones and sandstones with

seams of coal, corresponding, apparently, with the Upper Carboniferous. The coal-seams are of freshwater or terrestrial origin, but the greater part of the series is marine. In some places there are unfossiliferous dolomitic deposits at the top, which probably indicate lagoon conditions and may perhaps be of Permian age.

North and west of Peking the Carboniferous series is followed by plant-bearing beds of Mesozoic age; but in northern China generally the only later deposits are some reddish sandstones with mammalian remains, the loess and the deposits formed by the rivers. The mammalian remains indicate that the sandstones in which they occur belong to the later part of the Tertiary period. The loess and the river deposits belong to the Quaternary period. The loess is entirely a terrestrial deposit and apparently consists of the fine dust brought by the winds from the arid plateaux of Central Asia. It covers a very large area, and in some places reaches a thickness of one or two thousand feet.

In the Southern Uplands the geological sequence is more complete. All the Palaeozoic systems are represented, and mostly by marine deposits There are, however, coal-seams, which must be of terrestrial origin, in the Upper Carboniferous.

In Yunnan and Kweichow marine Triassic beds have been found, but elsewhere the Palaeozoic beds are succeeded by sandstones and shales, often red in colour, containing remains of plants. These were evidently laid down upon the land, and the plants indicate that they were formed towards the close of the Triassic period and during the earlier part of the Jurassic.

No Upper Jurassic or Cretaceous beds are known; but red sandstones and clays containing mammalian remains of late Tertiary age occur in Szechwan and elsewhere.

Economic Geology

The coal-fields of China are amongst the most extensive in the world, and coal has been worked on a small scale at a number of localities both in the Northern Uplands and the Southern Uplands.

The coal-bearing strata extend from the Upper Carboniferous to the Jurassic, and in many cases the precise age of the coal-seams is still uncertain. On the whole it seems that in the Northern Uplands Carboniferous coal predominates up to about the latitude of Peking, while farther north the Jurassic coal becomes more important. In the western half of the Southern Uplands, in Szechwan and Kweichow for example, the Mesozoic beds (Upper Triassic and Lower Jurassic) are the principal source of the coal; while in the eastern half the coal is mostly Palaeozoic (Upper Carboniferous and Permian).

Probably the most important coal-field, if it were more accessible, would be that of Shansi, extending into the neighbouring provinces of Shensi and Honan. It includes seams of very pure anthracite and of excellent bituminous coal stretching over an enormous area.

Actually, however, the coal-fields which are most extensively worked are those which are within comparatively easy reach of the more densely populated regions, for example, in the hills to the west and north of Peking, in Shantung, and in Szechwan, Kiangsi, and Honan.

Amongst other minerals which may be mentioned are iron-ore, which occurs in Szechwan and in the Shansi coal basin and no doubt in many other regions; copper and tin ores in Yunnan; and salt in Szechwan.

CHAPTER III

METEOROLOGY

General conditions — Pressure — Land-storms — Typhoons — Rainfall — Climate of the Yangtse Valley—Shanghai—Chengtu—Hankow—South China—Hongkong—Macao—Canton—Province of Kwangsi—Wuchow —Province of Yunnan—North China—Weihaiwei—Province of Chihli—Peking—Manchuria—Central Asia—Province of Kansu—Siningfu—Tunhwang — Mongolia — Urga — The Gobi — Uliassutai — Sinkiang (Chinese Turkestan)—Lukchun—Yangikul—Lob-nor—Tibet—Lhasa.

Authorities: Hann, Klimatologie, 1911; China Year Book, 1914; China, Maritime Customs, Decennial Reports; Meteorologische Zeitschrift; Hongkong Observatory, Monthly Bulletins; Annales Hydrographiques, 1901–2; Geographical Journal, &c.

General Meteorology

Certain general conclusions regarding the changes which take place in the temperature of China during the course of the year may be drawn from an examination of Tables III–IX. In Southern China the summers are long and hot, the winters short and mild. At Hongkong, for example, the mean temperature does not fall below 80° F. during the four months, June to September, and only during the month of February is it below 60° F. In the interior the heat of summer and the cold of winter alike tend to be greater, though much naturally depends upon local conditions of elevation and exposure. In Central China the period of greatest heat is less prolonged, and July and August are the only months during which the mean temperature is above 80° F. The winters are much colder than farther south, and in many places January and February show a mean temperature below 40° F. Northern China does not experience the same intense heat in summer, and the mean temperature is generally between 75° and 80° F. near the coast. Farther inland, where it tends to be higher, it is, as a rule, modified by the height of the land. In winter,

January and February are the coldest months, and then the mean temperature is below, and in places considerably below, freezing-point.

The conditions which prevail farther in the interior of the Asiatic land mass ought also to be noted here, as they have very considerable influence upon the climate of China Proper, and for the same reason some particulars relating to Manchuria, Mongolia, Turkestan, and Tibet are also included in this chapter. During the winter months great cold prevails, especially in north-eastern Siberia, where Verkhoyansk has a January mean of $-59°$ F. In summer, on the other hand, the interior of the continent heats up rapidly, the maximum temperature being reached along a stretch of country lying between the Red Sea and Northern India.

As a result of these changes in temperature there are also great changes in atmospheric pressure. Precise details are unfortunately wanting, but the figures given in Table I show their general character. During the winter months a high-pressure system is established over the north-east of Asia. This system reaches its maximum intensity in January, when its centre lies over Lake Baikal. At the same time a belt of low pressure lies over the Pacific south of the Aleutian Islands. The general tendency therefore is for off-shore winds to blow in the north of China, and as far south as Shanghai their direction is more or less from the north-west. Further south they bend round towards the east and reinforce the ordinary trade-winds. The winds which blow from the north-west are generally dry and cold, and they bring but little rain, but those from the north-east deposit a fair amount of moisture upon the coasts of Southern China.

By the month of April atmospheric conditions have undergone a considerable change. The high-pressure area over the land has diminished in intensity, while the low-pressure area over the Pacific has filled up to a considerable extent. Farther to the south the tropic belt of high pressure has moved north and lies with its axis along the 30th parallel. Consequently the barometric gradient is nowhere great, and as a result the

winds are light and irregular. In the south-east of China the north-east wind still prevails, but along the coast of Central China the winds are ESE., while farther to the north their direction is often from the south-west. Along the whole coast, moreover, land and sea breezes frequently blow at this season of the year

TABLE I

Mean Barometric Pressure

(Reduced to freezing-point and sea-level)

	Shang-hai.	*Hong-kong* [1].	*Foochow.*	*Chung-king.*	*Chefoo.*	*Peking.*
	ins.	ins.	ins.	ins.	ins.	ins.
January .	30·33	30·16	30·26	30·22	30·20	30·37
February .	30·28	30·14	30·24	30·12	30·27	30·21
March . .	30·17	30·06	30·14	30·06	30·17	30·22
April . .	30·00	29·96	30·00	29·96	30·04	30·05
May . .	29·87	29·86	29·91	29·81	29·85	29·87
June . .	29·74	29·76	29·78	29·69	29·67	29·67
July . .	29·69	29·73	29·73	29·64	29·59	29·66
August . .	29·73	29·74	29·75	29·72	29·63	29·79
September .	29·91	29·84	29·86	30·00	29·82	29·85
October .	30·11	29·99	30·02	30·10	30·03	30·14
November .	30·24	30·11	30·16	30·19	30·15	30·33
December .	30·31	30·19	30·26	30·32	30·17	30·35
Yearly Mean .	30·03	29·96	30·00	29·97	29·96	30·04

During the next three months a complete change takes place with the heating up of the Asiatic area. The high-pressure system which had its maximum over Lake Baikal diminishes in intensity and moves off towards the north-west, while a low-pressure system with its minimum over north-west India has spread over the greater part of Mongolia, Manchuria, and China. The tropic belt of high pressure has moved northward over the Pacific and increased in importance. By July the climate of China is under the control of the high-pressure system over the sea and the low-pressure system over the land. Along the southern part of the coast the wind blows in a direction varying from SE. to SW., at the mouth of the Yangtse it is markedly SE., in the Yellow Sea and on the peninsula of Shantung it blows directly from the south.

[1] These figures should be compared with those given in Table VI.

These winds on reaching the coast are drawn inland, where their direction may be considerably modified by local topographical conditions. As they blow from the warm ocean they are heavily charged with moisture, and it is during this period of the year that China receives the greater part of its rainfall. It is important to note, however, that the slope up which these winds are drawn into the interior is a gradual one, and precipitation takes place gradually, so that no part of China suffers from droughts similar to those which occur in India in years when the monsoon is weak.

In September the atmospheric conditions of the winter months begin to reassert themselves. The tropic belt of high-pressure still retains its position but is decreasing in intensity, while farther to the north a low-pressure system is developing to the north of the Aleutian Islands. But the governing fact is the return of the high-pressure system over Lake Baikal, as a result of which the conditions which prevailed during the summer monsoon undergo a complete change. To the north of Shanghai the wind blows NNW., while to the south it blows from the north-east. During the following months these conditions become more marked as the high-pressure system over the land increases in intensity and the low-pressure area over the Pacific moves farther south.

The general atmospheric conditions in winter and in summer having been examined, some special features may next be noted. In winter a certain number of storms always blow from the interior towards the coast, following a direction between NE. and ESE. These storms are of various types. The first is cyclonic in character. A depression, sometimes circular, but more generally elliptic, moves towards the coast, causing the usual weather conditions associated with such systems. When it reaches the open sea the winds circling round it acquire considerable force and often cause violent storms. The second type is rather different. It consists of a long atmospheric depression, the line of lowest readings being maintained at almost the same level for hundreds of miles. This line of low pressure is seldom straight and

usually winds about. As a result various anomalies occur. Two places very widely apart may at the same moment experience the same sudden change of pressure and a reversal in the direction of the wind, or it may happen that places on the coast come under the influence of the depression before places in the interior.

At any particular station during the passage of one of these depressions the weather conditions are somewhat as follows: As the depression approaches the barometer slowly falls, while light winds, gradually dying out, blow from the SE., S., and SW. The temperature rises and fog or rain occurs. As soon as the depression has passed, the wind veers round and blows WNW. or NW.; it is dry and cold, and often causes rough weather along the coast for two or three days, or even longer.

A third type of storm during the winter months is due to a simultaneous expansion of the high-pressure system over the land and the low-pressure system over the ocean. For example, if the latter extends westward so as to touch the coasts of Japan while the former moves westward over Manchuria and Mongolia, the barometric gradient becomes very steep and winds blow from land to sea with considerable violence. Several storms each year are caused in this way.

In summer the coasts of China are exposed to considerable danger from typhoons. These depressions generally originate in the Pacific along the polar margin of the equatorial belt of low pressure, and between June and October, when they are most frequent and most violent, their starting-point is somewhere in the quadrilateral between 8° and 20° N. and 126° and 139° E. They move north-west, and either strike the coast of Indo-China or veer towards the north-east and reach the coasts of China and Japan. The storm centre is marked by very low barometric pressure, and the wind blows round this inwards towards the centre in a counter-clockwise direction at a speed that may reach from 50 to 110 miles an hour. The centre itself moves forward at a rate of 8 to 50 miles an hour, the usual rate in the north of the China Sea being about

9 miles. There is usually one storm of this description during the month of May, and in June there may be several, but it is seldom that they are of such violence as those which occur during the four following months. They appear to be most numerous in July, but it is probable that observations over a prolonged period would show that there are as many in August and in September. The average number each year is about sixteen. It may be noted that typhoons rarely reach Shanghai, as they are either drawn inland south of that port or they recurve and move towards Japan.

Rainfall.—Summer rains are a characteristic of the 'monsoon' climate. They occur everywhere; although the actual amount of rainfall varies considerably. It is particularly abundant in sub-tropical regions, but very small in some parts of the interior. Between these extremes almost every stage is represented.

Again, the proportion which monsoon rains bear to the total annual rainfall is by no means constant. It is greatest in North China, where 82 per cent. falls in the four months, June to September. In Central China and in the lower and middle course of the Yangtse about 48 per cent. falls during the same period; on the coast from Shanghai to Foochow 49 per cent.; and south of Foochow, 54 per cent. See Table II.

In North China the annual rainfall is generally less than 39·3 inches. In Central and South China it invariably exceeds that amount, except in a few small islands, where the average is somewhat lower than on the mainland. Nevertheless, for certain periods the rain is as plentiful in North China as in the tropics, but during the winter the prevalence of cold land-winds associated with high barometric pressures causes extraordinary dryness. In the Yangtse Valley and farther south the rainfall is more evenly distributed; the winter is damper and the rainy season begins as early as April.

Along the coast from Shanghai to Amoy the maximum rainfall takes place in June. This is usually followed by a diminution in July and a fresh increase at the end of the summer. South of the Tropic of Cancer the distribution again approaches

TABLE II

Rainfall of Various Districts, Monthly Percentage and Annual Average

Station	Manchuria.	North China.	Korea.	Shanghai–Foochow.	Yangtse River.	Foochow–Canton.	SW. Formosa.	N. Formosa.
Latitude N.	43½°	39½°	37°	30°	31°	23½°	22½°	25°
Longitude E.	124°	118°	128°	122°	116°	117°	120°	121½°
	%	%	%	%	%	%	%	%
January	1·5	0·4	3·5	5·3	3·9	3·2	1·7	9·8
February	1·0	0·9	2·8	6·3	4·5	3·5	1·6	9·3
March	2·6	1·1	3·5	8·4	6·8	7·5	3·1	11·2
April	4·4	3·0	7·2	8·4	11·1	9·3	4·1	6·7
May	9·0	6·4	6·3	8·8	12·7	14·6	12·5	8·4
June	12·1	14·1	13·1	16·5	16·7	17·3	18·6	8·5
July	26·1	33·0	19·8	9·7	13·5	13·0	20·1	6·0
August	21·0	24·3	17·0	11·5	9·9	13·5	20·4	7·4
September	11 1	11·0	13·7	11·0	7·5	10·1	10·2	11·5
October	6·4	3·3	4·3	7·1	7·8	4·3	4·1	7·3
November	2·6	2·1	4·8	4·4	4·0	1·5	1·6	7·1
December	2·2	0·4	4·0	2·7	1·6	2·2	2·0	6·8
Annual average (in inches)	21·26	20·87	43·31	46·46	46·46	58·27	64·96	145·67

TABLE III

Mean Temperatures and Rainfall in Central China (Yangtse Valley)

Station	Sikawei.	Hang-chow.	Ho-ch'iu.	Kiukiang.	Hankow.	Shasi.	Chung-king	Chengtu.	Hweihsien Kan.
Latitude N.	31° 12′	30° 11′	32° 22′	29° 44′	30° 35′	30° 18′	29° 34′	30° 40′	33° 46′
Longitude E.	121° 26′	120° 12′	116° 15′	116° 8′	114° 17′	112° 15′	106° 54′	104° 15′	106° 4′
Altitude	33 ft	33 ft.	—	—	—	—	853 ft. ?	1,509 ft.	3,117 ft
Number of years	34	5	13	6	10	5	6	4	1
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.
January	37·5	41	34	36·5	39	40	47·5	44	27
February	39	38·5	38·5	40·5	40	39·5	49·5	45	33·5
March	46	47	48·5	49·5	49·5	48·5	55	53	47·5
April	56·5	58·5	59·5	61·5	61	60	67·5	62·5	59
May	65·5	68·5	69·5	71	71	70	71·5	70·5	63·5
June	73·5	76	77·5	77	78	76·5	77	76	72
July	80·5	82·5	82	84	83·5	81	80	79	79·5
August	80	81·5	81·5	83·5	83·5	81·5	81·5	77·5	72
September	73	74·5	72·5	75·5	76	72·5	73	70·5	61·5
October	63·5	64·5	62	65	65	63·5	66	63	53
November	52	52	49	54	54	53	57	54	43
December	42	44	38	42	43·5	45	49	46·5	31
Year	59	61	59·5	61·5	62	61	64·5	62	53·5
Range	43	44	48	47·5	44·5	42	34	35·5	52·5
Rainfall (in inches)	44·02	65·51	34·72	59·96	54·45	47·68	42·48	37·09	—

more nearly what obtains in North China, but not until the Gulf of Tonkin is reached does the summer maximum become again so disproportionately great.

The Yangtse Valley

From Table III it appears that in the Yangtse Valley no diminution of temperature is recorded as one proceeds farther inland. On the contrary, the winter is appreciably warmer. The cooling influence of the NW. land-wind is more pronounced on the flat coast of Shanghai than in the more sheltered middle course of the Yangtse.

Shanghai.—The following statistics are taken from the Sikawei publications :

TABLE IV

Sikawei Observatory. Meteorological Return for a Period of 34 Years

Months.	*Temperature of average year.*			*Average diurnal variation of temperature.*	*Average rainfall.*		*Average cloudiness : 0=cloudless sky. 10=completely overcast.*	*Wind.*	
	Max.	*Mean.*	*Min.*		*Number of days with rain.*	*Amount of rain in inches.*		*Mean velocity, miles per hour.*	*Mean direction.*
	° F.	° F.	° F.	° F.					
January . .	60	37	20	10	10	2·15	6·3	8·4	N. 9° W.
February .	62	39	23	9	10	2·29	6·8	8·7	N. 8° W.
March . .	74	46	29	12	13	3·21	6·8	8·9	N. 52° E.
April . .	84	56	36	12	13	3·57	6·7	9·3	S. 76° E.
May . . .	88	64	46	13	13	3·60	7·0	8·7	S. 55° E.
June . .	95	75	57	11	14	6·66	7·4	8·5	S. 53° E.
July . .	98	80	67	9	11	5·10	6·2	8·9	S. 39° E.
August . .	97	80	67	10	11	5·94	5·6	8·4	S. 62° E.
September .	92	72	58	11	12	4·72	6·3	6·9	N. 45° E.
October .	83	63	41	12	10	3·31	5·8	6·5	N. 31° E.
November .	74	52	30	12	7	1·85	5·1	7·1	N. 8° W.
December .	65	42	22	12	7	1·18	4·7	8·4	N. 23° W.
Year . .	81	59	41	11	131	43·58	6·2	6·2	

Snow, which is a permanent feature of the northern landscape in winter, becomes of rarer occurrence farther south, until in the southern provinces it appears on the higher ground only. In Shanghai snow falls every winter, but may be regarded as rare.

Chengtu, in the large plain of Szechwan, has an average yearly temperature ranging from a mean maximum of 92° F. to a mean minimum of 33°. The diurnal range of variation is very small, only 10·5°, but in spring it is 12·2°. The rise in temperature is especially marked in May, a month which the natives consider most trying, although the temperature is not as high as in July. March and November are on the whole the pleasantest months in the year. The average rainfall is as follows :

	Winter.	*Spring.*	*Summer.*	*Autumn.*	*Year.*
Rainfall in inches . .	0·87	4·05	24·13	8·03	37·08
Number of days with rain .	13·5	26·5	39·9	31	110·9

Nearly all the rain falls from June to September. Snow is rare. After the very dry months of December and January there is generally during February some fine rain. March again is dry.

Rain generally accompanies N., NE., or ENE. winds, but in the summer heavy downpours also take place occasionally with W., NW., or ESE. winds.

The air is dryest in May, and the maximum of humidity is reached in September after the rainy season. The winter is not as dry as in most parts of China, mists being a common occurrence. The latter make their first appearance at the end of the autumn, but are most frequent in January and February.

The following table (Table V) has been compiled from observations made by Dr. Legendre during the period 1905–1908.

TABLE V

Chengtu (Szechwan): Meteorological Observations by Legendre (1905–1908)

	Temperature.						*Rainfall.*	
	Absolute highest.	*Absolute lowest.*	*Mean of daily max.*	*Mean of daily min.*	*Mean of daily ranges.*	*Mean.*	*Amount (inches).*	*Rain days.*
	° F.	° F.	° F.	° F.	° F.	° F.		
January . .	55·5	32	49	39	9·5	44	0·24	4·5
February . .	61	34	50	40·5	9·5	45	0·43	6·0
March . .	74	38	59	47·5	11	53	0·43	6·5
April . .	81·5	47·5	68·5	56·5	12	62·5	2·09	10·0
May . . .	90·5	55	77	63·5	13·5	70·5	1·54	10·0
June . . .	89	64·5	81	70·5	10·5	76	4·57	13·2
July . . .	91·5	67·5	85	73·5	11	79	8·15	13·0
August . .	90·5	66	83·5	72	11	77·5	11·42	13·7
September . .	84·5	59	75	66	9	70·5	5·98	13·5
October . .	75	48·5	67·5	58 5	9	63	1·57	12·0
November . .	67·5	40·5	58·5	49·5	9	54	0·47	5·5
December . .	58·5	33·5	52	41·5	10·5	46·5	0·20	3·0
Year . . .	92	31	67	56·5	10·5	62	37·09	110·9

At Hankow and in the Han valley north winds are prevalent. They last for 7 or 8 months (August to April). In summer winds are often accompanied by storms and heavy downpours. By the end of May the temperature reaches a maximum of 97° F., and in the lower Han the first harvest (mainly wheat) is gathered. In January snowfalls are no rare occurrence, and above the altitude of 4,265 ft. mountains remain snow-capped until the beginning of April.

South China

The characteristics of the sub-tropical climate of South China have already been summarized. Particulars of a few important stations are added here. Those referring to Hongkong, based on official returns of 1915, will be found most trustworthy and detailed (see Table VI).

Canton.—In ordinary years the summer maximum at Canton is 96° F., and the winter minimum 42°. The regular rains last

from March to June, and the excessive moisture and 'mugginess' of the atmosphere make the season trying and unhealthy. The succeeding months are drier, occasionally oppressively hot, but generally tempered by the SW. monsoon. Throughout the summer frequent depressions occur, often followed by typhoons, which occasionally do serious damage on the coast. These storms have a marked effect in lowering the temperature in their neighbourhood, but it is doubtful whether the abrupt transitions which they cause, from stifling heat to comparative chilliness, are altogether conducive to health. The weather in September is variable. As a rule, the months October and November are pleasant, the atmosphere being dry, clear, and bright, and comparatively cool. Towards the end of November the temperature falls considerably, and the Canton winter may be said to have commenced; it lasts through December, January, February, and March, the last two months being generally damp, chilly, and disagreeable.

Opinions differ as to the influence of the climate of Canton on foreigners, but there can be little doubt that it is only the exceptionally robust who do not suffer from the relaxing effects of the damp and prolonged heat of successive Canton summers. The place is by no means unhealthy, however, and enjoys a singular immunity from epidemics and zymotic diseases. It escapes, too, the extremes of heat, which are a feature of the shorter summers in the north.

In the Province of Kwangsi the temperature covers a great range, frequently falling considerably below freezing-point in the winter, for some weeks, in the high north-west—and even occasionally so in the same period in the south, adjacent to Tonkin—while upon the mountains separating Kwangsi from Tonkin snow is occasionally to be seen. On the other hand, the temperature frequently rises above 100° F. At Wuchow the temperature varies from 101° F. in summer to 32° F. occasionally in winter, when thin ice forms in the shallower pools and white frost is abundant in the early morning. For six weeks—January until the middle of February—the cold is particularly emphasized by the northerly winds, which set in in October and continue until March.

TABLE VI

HONGKONG OBSERVATORY: METEOROLOGICAL RETURN FOR THE PERIOD 1884–1913

Month.	Barometric Pressure.		Temperature.							Humidity.	Cloud (0–10).	Rainfall.			Direction of wind.
	Mean.	Mean diurnal range.	Absolute highest.	Absolute lowest.	Range in month.	Mean of daily max.	Mean of daily min.	Mean of daily range.	Mean.			Total.	Duration.	Rain days.	
	ins.	ins.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	%		ins.	hrs.		
January .	30·040	0·108	79·3	32·0	47·3	64·6	56·3	8·3	60·0	74	6·5	1·442	52	6·7	N. 76° E.
February .	30·024	0·106	79·1	38·4	40·7	62·7	55·1	7·6	58·4	76	7·4	1·688	70	8·5	N. 77° E.
March .	29·939	0·103	82·3	45·9	36·4	67·1	59·6	7·5	62·8	83	8·4	2·987	83	11·2	N. 84° E.
April . .	29·844	0·093	88·6	51·8	36·8	74·6	66·9	7·7	70·2	85	8·0	5·511	79	11·8	N. 89° E.
May . .	29·750	0·084	91·5	62·0	29·5	81·4	73·6	7·8	76·8	83	7·4	11·713	90	15·6	S. 80° E.
June . .	29·654	0·070	93·6	68·9	24·7	85·3	77·6	7·7	80·9	82	7·6	15·681	87	20·3	S. 31° E.
July . .	29·619	0·068	94·0	72·1	21·9	86·7	78·3	8·4	81·9	82	6·7	12·555	66	19·8	S. 39° E.
August .	29·628	0·073	97·0	71·6	25·4	86·4	77·7	8·7	81·4	83	6·5	14·362	68	16·7	S. 50° E.
September .	29·719	0·080	94·0	65·6	28·4	85·3	76·6	8·7	80·4	77	5·9	9·668	54	14·4	N. 81° E.
October .	29·874	0·091	93·8	57·4	36·4	80·8	72·6	8·2	76·2	71	5·1	4·911	35	8·0	N. 74° E.
November .	29·990	0·101	86·1	46·7	39·4	74·3	65·2	9·1	69·2	66	5·2	1·421	29	5·2	N. 63° E.
December .	30·056	0·106	81·9	40·7	41·2	67·6	58·5	9·1	62·6	67	5·2	1·226	37	5·2	N. 65° E.
Year . .	29·845	0·090	97·0	32·0	—	76·4	68·2	8·2	71·7	77	6·7	83·165	750	143·4	N. 86° E.

TABLE VII

Climate of Macao

Meteorological return for the period 1882–93—Lat. N. 22° 11′, Long. E. 113° 32′, Alt. 26 ft.

	Barometric pressure.	*Temperature.*					*Humidity.*	*Cloud (0–10).*	*Rainfall.*		*Days with storms.*	*Days with Lightning.*	*Days with Fog.*
	Mean.	*Average.*			*Absolute.*				*Amount (inches)*	*Rain days.*			
		Max.	*Min.*	*Mean.*	*Max.*	*Min.*							
	ins.	° F.	° F.	° F.	° F.	° F	%						
January	30·18	66	55	58·5	76·5	44	76	5·6	1·54	3·8	0·1	0·1	2·4
February	30·15	63	53	58·5	74·5	44·5	80	7·1	1·30	5·1	0·1	0·1	5·2
March	30·07	68	59·5	63·5	79·5	50 5	85	8·0	4·09	8·5	2·4	0·9	6·5
April	29·98	77	68	72·5	87	59	86	7·1	10·94	9·5	5·1	2·7	5·7
May	29·86	83·5	74·5	79	91	68	84	6·4	10·90	10·7	4·2	5·0	0·3
June	29·78	87·5	78·5	83	93·5	73·5	84	5·8	16·77	13·9	4·4	6·1	0·0
July	29·72	88·5	79·5	84	94·5	75	85	5·7	12·83	15·6	5·4	8·3	0·0
August	29 76	88·5	79	83·5	94	75	84	5·4	11·65	12·5	5·8	7·0	0·0
September	29·83	88	77	82·5	94·5	71·5	77	4·8	7·72	9·6	1·9	5·6	0·0
October	30·01	85	73·5	79	91·5	66	72	3·7	2·64	3·1	0·3	1·6	0·0
November	30·13	77	65	71	85·5	54·5	69	4·0	0·71	1·8	0·1	0·1	0·2
December	30·19	70	57·5	64	78	48·5	67	3·6	0·75	1·2	0·1	0·0	0·0
Year	29·97	78·5	68	73·5	96·5	41·5	79	5·6	81·84	95·3	29·9	37·5	20·3

The seasons consist of a dry and pleasant winter, during December, January, and half of February ; a chilly interval, with rain, preceding spring, lasting until mid-March ; a period of gradually rising temperature with rain, which may be called spring, lasting until early May ; a period of heat, extending from May until the beginning of October, with tropical and torrential rains at intervals during May and June, together with heavy thunderstorms during midsummer ; and a cooler and dry autumnal period, concluding towards the end of November—at this period occur severe thunderstorms with vivid and dangerous lightning.

The following table is based on observations made during the period 1898–1901 :

	Average Temperature.		*Rainfall.*
	Max.	*Min.*	
	° F	° F	inches.
January	79	34	0.96
February	89	40	1·22
March	84	39	3·06
April	92	50	8·00
May	95	61·5	7·10
June	96·5	69	5·94
July	96	72	6·35
August	101	73	5·02
September	96	65	5·08
October	94	56	0·19
November	91·5	43	0·43
December	82	40	0·24
Year	91·5	53·5	43·59

The climate of Yunnan is influenced by the SW. monsoon. The rainy season lasts from June to October. But climatic conditions vary considerably in different parts of the province. Thus, in the NW. region there are two rainy seasons, one from July to September, and the other in February, whilst the valley of the Mekong from latitude 25° to 27° gets very little rain at all. The valley of the Salween is damper, more thickly covered with vegetation, and more unhealthy than that of the Mekong, especially in the rainy season. The winter months, November to February, are the pleasantest.

Snowfalls are common on the mountains, some of the crests remaining snow-clad all the year round.

In the SW. the valleys are low-lying and malarious. The winter in the valley of the Red River is dry, up to a height of 3,000 ft., above which the hills are enveloped in mist and rain. Mist is also prevalent in East Yunnan, where the climate more nearly approximates that of Szechwan and Kweichow.

The table-land in the centre of the province enjoys a better climate. The heat, though considerable, is seldom excessive, and the range is small. At Talifu a record kept for 14 months showed a maximum of 76° and a minimum of 36°.

North China

The monthly mean temperature and annual rainfall of various stations in North China and Manchuria are given in Table VIII.

The figures for Weihaiwei (Table IX) refer to the year 1910 only.

Chihli, and the loess region generally, is often visited by sand-storms. The sky is hardly ever quite clear, the haze which shrouds valleys and mountains being produced by very fine dust held in suspension in the air.

In Peking the greatest diurnal variations of temperature take place in May and amount to 51° F.; from November to January they are reduced to 45·5°. The average monthly variation reaches in April 49·5°, but in July and August, during the summer rains, it is only 29·7°. For mean temperatures see Table VIII The relative humidity is in winter 58 per cent., in summer 71 per cent.; the minimum 49 per cent. being recorded in April, the maximum 76 per cent. in July–August. The average cloudiness (taking 10 as maximum) is 2·1 in winter, 4·9 in summer, 3·4 for the whole year. The average number of rainy days per winter month is 2·5, and during each of the three summer months 11·8 (July 13·8 days). The average amount of rain in inches is as follows: January 0·118, February 0·197, March 0·276, April 0·630, May 1·535, June 3·346, July 8·386, August 6·457, September 2·638, October 0·630, November 0·276, December 0·079; total for the year 24·568.

TABLE VIII

Mean Temperatures in Manchuria and North China

Station	Harbin.	Mukden.	Newchwang.	Dairen (Dalny).	Chefoo and Weihaiwei.	Kiaochow.	Tientsin	Peking.	Hsi-wan-tzŭ (Si-wan-tse).	Taiyüanfu.
Latitude N.	45° 43′	41° 48′	40° 57′	38° 56′	37° 34′	36° 4′	39° 10′	39° 57′	40° 58′	37° 55′
Longitude E.	126° 40′	123° 23′	122° 27′	121° 36′	121° 30′	120° 17′	117° 10′	116° 28′	115° 18′	112° 52′
Altitude	525 ft.	197 ft	16 ft.	33 ft.	66 ft.	246 ft.	16 ft.	131 ft.	3,822 ft.	2,592 ft.
Number of years	9	6	6	5	10	10	10	36	7	3
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.
January	-1·5	7·5	16	24·5	30·5	31·5	25	23·5	4·5	21
February	5·5	10	17	25 5	30	32	27	29	13·5	26·5
March	24	29·5	31·5	35·5	39	40	39·5	41	28	36·5
April	42	48	47·5	47·5	50·5	50	54	56·5	41·5	53
May	56	59	60·5	58·5	61·5	60	66	68	54	65·5
June	66	70·5	70·5	67·5	70	68	74·5	76	63	74·5
July	72	76	76	73·5	75	74	78·5	79	67	80
August	69·5	74	76	75·5	76·5	76·5	78	76·5	64·5	74
September	58	62	65·5	69·5	70·5	70·5	70	67·5	54	63·5
October	40	48	53·5	58·5	60·5	61	57	54·5	41	51
November	21	28	34·5	42·5	46·5	47·5	41·5	38·5	21·5	39
December	3	16·5	21·5	30·5	35·5	36	30	27·5	9·5	21
Year	38	44	47·5	50·5	54	54	53·5	53	38·5	50·5
Range	74	68·5	60	51	46·5	45·5	53·5	55·5	62·5	59
Rainfall (inches)	19·05	24·13	22·20	22·79	22·20	24·53	19·17	24·57	15·43	13·78

TABLE IX

Weihaiwei Meteorological Return, 1910

	Barometric pressure.		*Temperature.*						*Rain or snow.*	
	Mean.	*Mean diurnal range.*	*Absolute highest.*	*Absolute lowest.*	*Range in month.*	*Mean of daily max.*	*Mean of daily min.*	*Mean daily range.*	*No. of days.*	*Amount.*
	ins.	ins.	° F.	° F.	° F.	° F	° F.	° F.		ins.
January	30·219	0·660	49	2	47	36	17	19	6 (4 snow)	0·78
February	30·253	0·740	52	2	50	41	17	24	1 (snow)	0·00
March	30·162	0·654	62	17	45	48	25	23	2	0·80
April	30·075	0·592	72	24	48	58	36	22	2	0·68
May	29·948	0·674	90	35	55	75	49	26	1	0 07
June	29·739	0·500	91	46	45	80	56	24	9	5·02
July	29·731	0·474	91	58	33	83	63	20	15	10·63
August	29·782	0·626	90	60	30	84	65	19	11	7·67
September	30·049	0·550	81	51	30	76	58	18	4	0·55
October	30·220	0·468	78	41	37	69	48	21	1	0·05
November	30·185	0·986	71	21	50	54	35	19	14 (2 snow)	9·18
December	30·332	0·686	45	8	37	36	19	17	8 (7 snow)	0·75
Annual mean	30·058	0·634	73	30	42	62	40	21	74 [1]	36·18 [1]

[1] Totals.

In winter the NW. winds which sweep across the table-land of Mongolia become warmer as they descend into the plains of Chihli, the edge of the Kalgan plateau constituting a climatic divide.

In Manchuria strong SW. winds set in at the beginning of March and continue for about two months. They bring warmth and moisture from the south and usher in the spring, nevertheless the ground remains frozen until the end of March. April is the only real spring month, for in May summer can be said to have begun. Wheat sown at the end of April is harvested at the end of June or beginning of July. For mean temperatures see Table VIII, Harbin and Mukden.

Before June the rainfall is light, and heavy downpours with thunderstorms do not occur until July, when the heat is greatest. Rain often falls day and night without ceasing, with the result that the country is flooded and the earth rendered very soft. The best month in the year is October, when the weather is clear, the air mild and quickening, and the flowers in full bloom. Towards the end of the month the first frosty nights are recorded. In November frost sets in vigorously and holds sway until the following March. In Mukden the temperature sinks as low as – 27° F. and in Kirin even below – 40°. But such extreme temperatures are rare. During the summer months the maximum heat is 99° or 100°.

Central Asia

In the province of Kansu (about latitude 36°) the climate is agreeable. The winter, however, is cold, and the Yellow River, despite its very strong current, freezes entirely. From the end of March until October fine weather prevails. The temperature rises to 93° F. without becoming oppressive, and ripens excellent fruit, particularly melons of exceptional size. The rainy season sets in with SE. winds at the end of September and lasts during the greater part of October. Dust-

and sand-storms occur mainly in spring. They are often of a violent character, but the air soon clears again.

Above the altitude of 15,000 ft. the Nan Shan remain snow-clad all the year round. In the higher altitudes the weather is very variable during the summer; rain, hail, thunderstorms, snow, and sunshine often follow in rapid succession. The air is at times exceptionally clear and quite free from dust. From June 26 to July 25 the extreme temperatures recorded are 20·5° and 80°, the mean of daily minima and maxima being 31·5° and 65·5°.

The observations recorded in Table X were made at Siningfu (lat. 36° 37′ N., long. 101° 44′ E., alt. 7,808·5 ft.) in 1904 by Filchner

TABLE X

	Temperature.					*Humidity.*	*Cloud (0–10).*	*Rain days.*
	Absolute highest.	*Absolute lowest.*	*Mean of daily max.*	*Mean of daily min.*	*Mean.*			
	° F.	° F.	° F.	° F.	° F.	%		
May	74	36	65·5	43·5	53	34	5·8	7
June	88	43·5	76·5	50·5	63	52	5·8	14
July	95	46	78	55	65	66	6·4	11
August	86	41	74·5	50	61	65	4·3	15
September	76·5	38	67	43·5	54·5	65	5·7	11
October	69·5	29	56·5	36	45·5	57	4·3	8

N. of the Nan Shan, at an altitude of from 4,000 to 4,300 ft., on the edge of the desert, the diurnal variation of the wind in March is very regular. The night is perfectly calm. At about 8 a.m. a strong cold north wind sets in and continues for about two hours. At noon the maximum temperature is reached amid a perfect calm. But soon the north wind sets in again and blows until 4 or 6 o'clock. This north wind affects the skin in a most painful manner. The wind is E. in May, E. and SE. in June, SE. from July until October. During months at a stretch not a drop of rain falls, and sand-storms are frequent. But in summer the SE. monsoon determines a distinct rainy season.

'At Tunhwang on April 1, 1907, the thermometer registered a minimum temperature of – 7° F., or 39° below freezing-point. But before the month was ended the heat and glare had already become very trying (on April 20 the thermometer showed 90° F. in the shade), and whenever the wind fell, perfect clouds of mosquitoes and other insects would issue from the salt marshes' (Sir Aurel Stein).

Mongolia is largely covered by the Gobi. The latter, with the exception of a rainless central region, is not properly a desert, but approximates to the nature of a steppe. In eastern Mongolia continuous rain usually falls in the summer for two or three days in succession, and in winter a little snow is the rule. The northern regions are mountainous, with abundant vegetation. Urga, on the northern limit of the Gobi, is generally visited by easterly winds which set in in April or May and bring a little rain. The mean annual temperature is 28° F., the averages for January and July being respectively – 16° and 63·5°. The average cloudiness for the whole year is only 2·8, or 1·6 in winter and 4·4 in summer. The average rainfall is only 6·42 inches, there being no rain or snow except during the period May-September.

The southern limit of the Gobi is much exposed to heavy storms, especially in the spring when the NW. wind is most violent. On the other hand, the mean temperature is much higher than in the region of Urga.

In western Mongolia the wind is very violent and occasions frequent dust- and sand-storms. Extreme cold in winter is followed by intense heat in summer. The following figures are available for Uliassutai (47° 48′ N., 96° 50′ E., altitude 5,365 ft.). Mean temperature in January – 15·5° F., in July 65°; mean annual 30°. Extreme temperatures – 40° and 94°. The air is very dry and practically no rain ever falls. Easterly winds prevail in winter; NW. winds in summer.

Sinkiang, or Chinese Turkestan, is characterized by extreme temperatures, almost total absence of rainfall, and violent

sand-storms. West winds prevail except in the Lob-nor region (see below).

The following table gives the mean temperatures recorded at three stations in Sinkiang :

Station	Lu-k'o-ch'in (Lukchun).	Shufu (Kashgar).	Sochefu (Yarkand).
Latitude	42° 42′	39° 25′	38° 15′
Longitude	89° 42′	76° 7′	77° 16′
Altitude	50 ft. below sea-level	4,035 ft.	4,118 ft.
Number of years	2	3½	1
	° F.	° F.	° F.
January	13	21·5	21
February	27	32	31·5
March	45·5	47	44·5
April	66	63	64
May	75·5	66·5	70
June	85·5	75·5	76
July	90·5	81·5	81·5
August	85·5	78	74·5
September	74	66·5	66·5
October	55·5	54	56
November	33	38·5	39
December	21	27	24
Year	56	54·5	54
Variation	77·5	60	60·5
Rainfall (in inches)	—	1·81	0·51

The extreme temperatures recorded at Lukchun are − 5° and 108·5° F. The mean of daily ranges is in winter 24°, in spring 30°, in summer 30°, in autumn 30·5°, the minimum being in January (22°) and the maximum in September (34·5°). The average humidity in spring is 37 % at 7 a.m., 17 % at 1 p.m., 30 % at 9 p.m. ; in summer 45 % at 7 a.m., 20 % at 1 p.m., 32 % at 9 p.m. ; in September and October 53 % at 7 a.m., 24 % at 1 p.m., 43 % at 9 p.m. The average number of rainy days is 5·5 in winter, 6 in spring, 12 in summer, 1 in autumn ; total for the year 24·5 days. But the amount of rainfall is extremely small. The average cloudiness is 3·4 in winter, 4·7 in spring, 4·1 in summer, 3·2 in autumn ; annual average, 3·8.

At Yangikul, in the Tarim valley (lat. 40° 52′ N., long.

86° 51′ E., alt. 2,890 ft.), the following temperatures were measured in 1899–1900 by Sven Hedin :

	Temperature.			*Humidity.*
	Mean.	*Mean of Daily Max.*	*Mean of Daily Min.*	
	° F.	° F.	° F.	%
December . . .	20	38·5	6	69
January . . .	9·5	26	−1·5	67
February . . .	17	40·5	1	64
March . . .	40	54	22·5	55
April	55	69	38	45
May (1–19) . .	69	87·5	47·5	33

In the Lob-nor region E., ENE., and NE. winds prevail, the ENE. being particularly violent, and blowing almost without intermission in the day-time during the whole of spring. Locally it is called *Karaburan* (i.e. the black storm), because the clouds of dust it raises completely obscure the sky. Winter is marked by absence of wind, and in summer and autumn the air is comparatively calm.

Tibet has more rain than Sinkiang or Kansu, especially in the S. and SE. portion of the province, where the prevalent SW. winds are moist. At Shigatse, in the valley of Sanpo or Upper Brahmaputra (29° 3′ N., 89° E., about 12,800 ft.), December and January are noted for cold winds, which for three or four hours daily (generally between 11 a.m. and 2 p.m.) blow with extreme violence. Snow is seldom more than 12 inches deep. In May the sky is cloudy, and about the middle of June (or earlier still) the rainy season sets in and continues during July and August. The rainfall diminishes in September, and October is usually quite dry, the dryness being determined by cold E. winds which make their appearance at this time of the year. The number of rainy days in the Sanpo valley has been roughly estimated at : 20 in May, 11 in June, 12 in July, 20 in August, 14 in September.

The following temperatures were measured at Lhasa (29° 39′ N., 90° 57′ E., alt. about 12,900 ft.) :

	Absolute Highest.	*Absolute Lowest.*	*Mean of Daily Max.*	*Mean of Daily Min.*	*Mean.*
	° F.	° F.	° F.	° F.	° F.
August . .	95	46	86	48·5	67
September .	89	31	80·5	44	62

Observations made three times a day in 1900–1 gave the following results :

Month.	*At sunrise.*	*At 1 p.m.*	*At 9 p.m.*	*Mean.*
	° F.	° F.	° F.	° F.
December	18·5	35·5	27	27
June	58·5	73	63	65
Average for 235 days . .	41·5	58	48·5	49·5

The rainy season came to an end on September 13. October and November were perfectly dry. The first snow fell on December 7, but disappeared almost immediately. Subsequent snowfalls were recorded, viz. one in January, three in February, two in April, but it never settled long in the valleys. Heavy downpours became frequent after May 5. They occurred chiefly in the evening or during the night, and during May and June were not seldom accompanied by hailstorms.

CHAPTER IV

FAUNA AND FLORA

The Fauna

China may be divided into three main faunal districts :

(1) The southern district, stretching from the Salween to the sea and bounded on the north rather by the cooler climate and dense population than by the Yangtse, its natural frontier, is a tropical region exhibiting the animal forms of Burma, Siam, and Tonkin, to which the low jungle-covered hills are rather an approach than a barrier. Among birds the Porphyrio and pea-fowl (*Pavo spicifer*) of the south and south-west may be mentioned. The largest snakes are the pythons (*recticulatus*, *molurus*, and *bivittatus*), the poison-bearers being the cobra and the pit vipers.

The deer are all small, including muntjacs (*Cervulus*), of which three are indigenous, chevrotains, and the Chinese water-deer (*Hydropotes inermis*), and three species of tufted deer, all peculiar to the country. Leopards and tigers, smaller than those of India, are numerous, as are the Macaque monkeys, *rhesus*, *lasiotis*, a Chinese variety of the same, which is found also in Szechwan and in the interior, *Macacus arctoides*, and *M. sancti johannis* found only in Hongkong. A gibbon (*Hylobatis hainanus*) occurs in the island of Hainan.

Phayre's leaf-eating langur (*Semnopithecus phayrei*) is met with in the hot country adjoining Burmah; another langur (*S. roxellanae*) is found on the snow slopes of western Szechwan.

(2) In this district, bounded on the east by the Lolo mountains, the climate is abruptly modified by the intense cold of the Tibetan plateau, and the fauna is similar to that of the Himalayan slopes and of Tibet.

Ursus torquatus and *malayanus* occur together, and there are in considerable numbers that small, curious, bear-like form the panda, including the rare and distinct species *Aeluropus melanoleucus*. The leopards, which are very numerous, are so modified in colour and pelage as to be scarcely distinguishable from the ounce or snow-leopard, which is also found. The tigers, now very rare, have lighter, often almost grey, skins, and are as big as the Siberian race.

Of small cats, *Felis cattus* is common, and there also occur *Felis tristis*, *Felis scripta*, and a local form of *F. temmincki*, the Bay cat of Malaysia.

But the closest connexion with Indian fauna is found in the pheasants, deer, and antelopes. The goral (*Cemas goral*), known as the 'Good' Antelope from the excellent sport it provides, the serow (*Nemorhoedus bubalinus*), and the takin (*Budorcas taxicolor*), genera rarely represented in zoological collections, dwell on the mountains; musk deer (*Moschus sifanicus*), much reduced in numbers by continual pursuit, lie hidden in the forest belts, and muntjacs are found in the valleys.

The Phasianidae, so widely distributed throughout China, are represented here by more genera and species than elsewhere. Gold, silver, amherst, and other well-known pheasants occur in the valleys; high in the mountains west of Tatsienlu, often far above the snow-line, are found much rarer races, the horned pheasants or tragopans chiefly; *Ceriornis temmincki*, *Lophophorus l'huysii* akin to the monal, three species of the five known *Crossoptila* or eared pheasants, three blood pheasants (*Ithaginis*), two of those short, square-tailed pheasants the pucras, and doubtless others only waiting to be discovered.

At Batang, 30° N., are green parrots, the highest and most northerly range of the genus.

The flying squirrel (*Pteromys*) of Szechwan, the giant bamboo rat, the swimming shrew, and the mole-like *Scaptochinus*, all indigenous to the country, must be mentioned.

(3) This district, which extends eastward from the moun-

tains of Kansu and Shansi, comprises also the whole of the Great Plain of China. Here the fauna has so many affinities with that of North America that there must have been some land connexion at Bering Strait at no very remote geological epoch.

The halys, the only poisonous snake of North China, is closely related to the copperhead ; the one alligator of the Eastern hemisphere (*A. sinensis*), found in the Yangtse in 1891, is akin to *A. mississipiensis* ; the spoon-beaked sturgeon and the giant salamander have their counterparts in America.

The mandarin duck (*Aix galerita*), whose gorgeous plumes are entirely different from those of the Carolina summer duck (*A. sponsa*), is yet related to this loveliest of the Western Anatidae, and their soberly-dressed consorts are practically indistinguishable.

The recently discovered *Ovis jubata* of North Shansi is not more closely related to *Ovis poli* than to the bighorn sheep of the Rocky Mountains, which it slightly exceeds in size. The American wapiti, on the other hand, are rather larger than the Chinese, of which four species at least inhabit Shansi and Kansu.

The sable, glutton, and bison are likewise common to the two continents, also a number of other animals, e. g. otters, hares, foxes, and wolves, which are rather generally distributed in all northern latitudes.

On the other hand, *Cervus sika* in all its forms, and the Raccoon dog (*Canis procyonides*), remarkable for its unique habit of hibernation, are limited to Manchuria, China, and Japan.

From the Siberian plain, of which North China forms a part, huge flocks of mallard, teal, widgeon, pintail, and other well-known ducks, curlews, plovers, herons, snipe, and sandgrouse, the bean, and seven other varieties of geese, including the now rare swan goose (*A. cygnoides*), fly south in annual migration.

Swans, chiefly *Cygnus musicus*, are not abundant ; the black stork is common in China, so are the common and Demoiselle crane and the common heron. The egret (*Ardea*

garzetta), which furnishes 'osprey' plumes, is not unknown. The osprey itself, vultures (*V. monachus* and *Gypaetus barbatus*), eagles, bald-headed and white-tailed, several varieties of hawks and owls, large numbers of jays and magpies, woodpeckers, thrushes, and ousels, quail and partridges, make up a very incomplete list of bird life in N. China.

Fishes have not yet been carefully studied. The serpent-head (*Ophiocephalus argus*) occurs in most parts. The mandarin (*Siniperca chua-tsi*) seems to replace our perch; eels, bream, roach, gudgeon, are found, and commonest of all, the carp—the parent stock of the looking-glass carp, the telescope-eyed carp, and the gold fish.

Of the insects, the bombyx (*Bombyx mori*), the domesticated silk-producer, is probably not indigenous; the ailanthus silk moth (*Atticus cynthia*) is abundant, and has a great and increasing value. The kermes (*Coccus sinensis*) produces a wax used for wood-polishing—it is bred on a privet (*Ligustrum lucidum*) and transported 200 miles to be reared on an ash (*Fraxinus chinensis*).

Flora

The flora of China is one of the richest in the world, surpassing considerably, in variety of species, the analogous territory of the United States, which is approximately equal in area and between the same parallels of latitude. Over 9,000 species of flowering plants and ferns have already been described, of which about one-half are endemic or not known elsewhere; the other half being plants common to the adjacent regions, Himalayan and Japanese species preponderating. In spite of the arduous labours of the French missionaries David and Delavay, and of the British botanists Hance, Henry, and Wilson, whose immense collections (stored at Paris, and in the great herbaria at Kew and South Kensington) have not yet been thoroughly examined, there remain in China vast tracts to be explored botanically, so that the total number of species may be computed to reach 12,000 to 15,000.

The rich vegetation is due to the mountainous nature of the country, as in numerous valleys new species have been evolved and kept from extinction by their isolation. The virgin forest, which once spread over almost the entire country, has been in most parts extirpated by the progress of agriculture ; yet in the high mountains of the interior great forests still exist, and around villages and temples small woods have often been preserved, in which the nature of the indigenous flora can be studied. In the north the flora is palaearctic and differs little from that of Manchuria and Siberia ; but in the central and western provinces it strongly resembles in main features the vegetation of the Himalayas and Japan, whilst towards the south there is some accession of species that have immigrated from Burma and Indo-China.

Above a certain elevation, decreasing as latitude increases, but about 6,000 feet in Hupeh and Szechwan, the mountains are girdled by a coniferous belt, similar to that of the Alps, but with a distinct species of larch, and with numerous and different species of silver fir and spruce. Below this zone the woods are composed of deciduous and evergreen broad-leaved trees and shrubs, mingled together in an extraordinary profusion of species. Dicotyledonous forests of one or two species only are extremely rare, though small woods of oak, alder, and birch are occasionally seen. There is nothing like the extensive beech forests of Europe, the two species of Chinese beech being very rare and sporadic. The heaths, *Calluna* and *Erica*, which cover vast tracts of barren sandy land and of peat-mosses in Europe, are absent from China, where the ericaceous vegetation is composed of numerous species of *Rhododendron* and *Azalea*, which cover immense areas on many mountain slopes. The pine woods (*Pinus Massoniana* in the south-east and the Yangtse valley ; *Pinus sinensis* in the mountains of the central and western provinces and in the low hills of Chihli) are similar in appearance to the *Pinus sylvestris* forests in Europe, but are rarely extensive in area, and are of no great economic value at present.

Certain remnants of the Miocene flora, which now only exist

in Europe in the fossil state, are still conspicuous and similar in North America and China. In both regions there are several species of *Magnolia*, one species each of *Liriodendron*, *Liquidambar*, *Sassafras*, and *Gymnocladus* ; and curious genera like *Nyssa*, *Hamamelis*, *Decumaria*, *Catalpa*, *Coptis*, and *Diphylleia*. The *Taxodium*, or deciduous cypress of the swamps of the southern States, which was once widely spread over North America, Europe, and Siberia, is represented in China by the almost extinct *Glyptostrobus* or ' water pine ' of the Chinese, which occurs as a rare tree on the banks of rivers near Canton. *Pseudolarix*, *Cunninghamia*, and *Keteleeria* are magnificent coniferous trees which have become extinct elsewhere. The most remarkable tree known to science, *Ginkgo biloba*, the only surviving link between ferns and conifers, has only been seen in temple grounds in China, but is expected to be found wild in some of the unexplored districts of the interior. Its leaves, which resemble those of the maidenhair fern on a large scale, have been obtained in Tertiary beds in the Isle of Mull. In spite of the presence of the Miocene element in both floras, the appearance of the vegetation of China bears little resemblance to that of the United States. Though there are sixty species of oak in China, many with fine foliage and remarkable cupules, yet the red oaks, so characteristic of North America, with their bristle-pointed leaves, turning brilliant colours in the autumn, are quite unknown. The vast coniferous forest which extends from the Rocky Mountains to the Pacific Coast has no analogue in China, where the giant and preponderant Douglas fir (*Pseudotsuga Douglasii*) is represented by an allied species, so rare that it has only been found as yet in two stations. The giant *Sequoias* of America are replaced in China by *Cryptomeria*, which attains only half their height.

Most of the European genera are present in China, though there are curious exceptions, as the plane tree and the whole *Cistus* family, so characteristic of the Mediterranean region, are unknown. The *Rhododendrons*, of which only four species are European, have their headquarters in China, where over

130 species are known, varying in size from tiny shrubs, not six inches high, to tall trees. Herbaceous genera, like *Lysimachia*, *Primula*, and *Gentiana*, few in species in the West, have each a hundred species in China, extraordinarily diverse in habit, in size, and in colour and arrangement of their flowers. Shrubs and climbers, belonging to *Clematis*, *Rubus*, *Rosa*, *Lonicera*, and other common European genera, are extremely common in China, where they run riot in the number of their distinct species and multifarious varieties. The ferns are equally polymorphic, numbering over 400 species, and including strange and newly discovered genera, like *Archangiopteris* and *Cheiropteris*, which are unknown elsewhere. About forty species of bamboo have been distinguished, of which one with a square stem, from Fukien, is the most curious. The most northerly and the most common palm is *Trachycarpus Fortunei*, which is conspicuous in the Chinese landscape, as it is largely cultivated for its fibre, which is used for making ropes and cables, and in the manufacture of hats and rain-cloaks, used by the peasants in wet weather.

The Chinese, stimulated by the great abundance of beautiful flowering shrubs and herbs around them, became skilful gardeners at an early period; the Emperor Wu Ti established in 111 B.C. a botanical garden at Ch'ang-an (Sianfu), into which rare plants were introduced from the south and west. Many of our common garden plants originated in China. The *Chrysanthemum*, one of the most valuable of cultivated flowers, is derived from two wild species (small and inconspicuous plants) which are mentioned in the ancient Chinese classics. Many kinds of roses, camellias, lilies, and peonies are due to the skill of the Chinese gardeners. Some of the most ornamental plants that are now cultivated in Europe have been introduced from China, as *Wistaria*, *Diervilla*, *Kerria*, *Incarvillea*, *Dielytra*, *Hemerocallis*, *Funkia*, *Astilbe*, *Rodgersia*, *Primula* (*sinensis*, *obconica*, *pulverulenta*, &c.). The peach and most of the orange tribe are natives of China. The varnish tree (*Rhus vernicifera*), from which lacquer is obtained; the tallow tree (*Sapium sebiferum*); the white mulberry, on which silkworms are fed; the

wood-oil tree (*Aleurites*), which yields an oil used as a substitute for paint on woodwork; and the tea plant, were all first utilized by the Chinese. The Chinese have numerous medical plants, of which ginseng and rhubarb are the best known. Nearly all our cereals and vegetables have their counterpart in China, where there are numerous varieties which should be introduced either for their intrinsic merits or as material for breeding new kinds of value. The soya bean is a Chinese product.

CHAPTER V

HISTORY

I.—From Ancient Times to the Manchu Dynasty

Origins—Mythical and Semi-mythical Rulers—The Chou Period—Confucius and Lao-tzŭ—The Ch'in Dynasty and the First Universal Emperor—The Han Dynasty—Three Centuries of Short Dynasties—The T'ang Period—The Sung Dynasty—The Yüan or Mongol Dynasty—The Ming Dynasty—The Ch'ing or Manchu Dynasty.

Origins

When the traveller first sees the magnificent buildings of Hongkong and Shanghai he may be excused if he pictures these places to his imagination as the supreme efforts of Chinese civilization, and the whole of the vast mysterious interior as an intellectual wilderness swarming with ignorant and uncivilized people. But to the Chinese it is quite the other way about : the inherited Chinese notion has it that the whole coast-line is a dark and uncanny region on the extreme outskirts of the enlightened interior.

This unexpected view of things has its explanation, if not its justification ; for it is certain that the Chinese race, or at least that part of it taking the lead in culture, had its earliest developments in the lower Yellow River valley ; roughly speaking, from the point where it leaves all traces of the various deserts behind it, to a shifting spot usually not very far from the modern treaty-port of Tientsin, where it enters an enclosed corner of the World Ocean known to our maps and charts as the Gulf of Pechili. Naturally the spreading movement first took its obviously convenient directions up the courses of the various tributaries, some of which came down from the haunts of what we call the Tartar tribes in the north ; others from the Tibetan or Tartar-

Tibetan tracts in the west ; and, finally, a few from the south and east, two quarters entirely inhabited by populations more or less akin in language and sentiment to the superior political organization which was in sole possession of that key to progress—a written script.

It will be easier for the inquirer to grasp the reasonableness of China's elementary civilization ideas if he glances at old maps of the world as conceived at similar periods by ourselves, except that once more it was the other way about : the coasts of the Mediterranean were the habitats of the progressive tribes or nations in possession of a written script, whilst most parts of Europe, Asia, and Africa were totally unknown to these, except in so far as certain rivers brought messages from the wild interiors. Even so recently as the beginning of our Christian era the geographer Strabo produced a map showing that, once out of touch with the Black Sea, Caspian, Red Sea, and Persian Gulf, the civilizers of the Mediterranean knew less of what lay beyond that limited area than the Chinese knew of what lay beyond the Yellow River valley.

The next question is : How did the Chinese get to the Yellow River valley in the beginning ? Quite recently a learned attempt has been seriously made to connect the Chinese vocabulary with that of the old Sumerian language of Babylonia, both as to spoken sounds and as to written hieroglyphics. For present purposes it may be permissible to assume that, since man has remained organically unchanged so long, wherever human groups found themselves in remote times they had equal chances of social and political development, subject to the divers effects of their several physical environments. Until the art of writing, or of recording in some way was discovered, there could not be any ' history ' of what man did or had once done during countless ages. The Egyptians, Babylonians, and Chinese were amongst the few groups that actually did discover how to write, and they have been rewarded with a historical memory accordingly, whilst other groups have left no trace.

Mythical and Semi-mythical Rulers

The mythical and semi-mythical early Emperors of China may be ignored for practical purposes, for there are no definite dates anterior to 842 B.C. There are exhortations to virtue, descriptions of popular life, and so on; records of bad emperors and good, virtuous ministers and vicious: we may safely allow our imaginations to fill in details, for, in the main, the humdrum life of settled cultivators went on then much as it has done ever since up to fifty years ago. But there was no cotton, no sugar, no tea, nor of course any one of those numerous luxuries, such as tobacco, soap, &c., which are comparatively modern even to ourselves. On the other hand, the Chinese always had silk, and to them all other nations owe an exclusive debt for the use of this valuable clothing material. The legendary emperors, who are supposed to have introduced in turn most of the ordinary arts of life, fill up the greater part of the third millennium before Christ: then come two hereditary dynasties (the Hsia and Shang or Yin Dynasties) covering between them a period of over a thousand years. The very names of these 'Emperors' are in most cases obscure, and seem to point rather to dates than to personages: a few graves and indecipherable rock inscriptions still in existence are connected with or referred to those remote periods by native antiquaries; and quite recently numerous unquestionably ancient memoranda carved on scorched bones have been excavated.

The Chou Period

In the year 1122 B.C. the last wicked emperor of the second hereditary dynasty perished during a popular revolution brought on by his own licentious misdoings, and the chieftain of one of the vassal principalities into which Old China seems to have been at all times divided was called to the Imperial throne by general acclamation. A great many novelties and new organizations were introduced by this—the Chou—dynasty, which seems, whilst still a mere subject principality, to have

developed a special and fairly high civilization of its own, with new ceremonial, court, and social canons, all which it proceeded to impose upon the petty principalities over which it had now become supreme lord. Yet for the first three hundred years of its existence even this dynasty can only count as being semi-historical.

The fifth of the kings of reorganized China (1001–947 B.C.) is supposed by some to have discovered or visited Persia, Babylonia, and even Africa : after being buried in a grave for 600 years, an ancient Chinese ' book ' (bamboo slabs) recording this monarch's travels amongst the Tartars and Turki tribes in the year 990 B.C., was dug up about 1,600 years ago. Reduced to modern script the book is fairly intelligible, but does not seem to take the monarch beyond the middle course of the river Tarim in Kashgaria. In this connexion it may be mentioned that from this time onwards to the epoch of the historian Confucius (550 B.C.) there is abundant evidence that the Chinese were engaged in constant struggles with various Tartar tribes or nations along the whole line of the still existing Great Wall—parts of which, indeed, were already being constructed as local defences in those earlier days ; moreover, that the ruling dynasty, together with its kinsman vassals, had frequent marriage relations with Tartars, treated with them on equal social terms, and even recognized the possibility that China might all or in part fall under direct Tartar rule. In fact, Confucius himself, referring back to this earlier period, said that China had had a narrow escape of becoming a Tartar state.

This struggle with the Tartars, as will presently be seen, has gone on with scarcely a break to our own days, and though the nomad horsemen all the way from the Volga to the Yalu (Korea) have never numbered in all more than, say, a million fighting men, China has never, previously to A.D. 1900, really absorbed and governed any considerable part of the steppe Tartar land. With the rest of the world as she knew it, she had more success ; that is to say, with the various tribes speaking ' monosyllabic ' and ' tonic ' languages akin

to or at least in sympathy with the various Chinese dialects. As the streams of adventurous colonists followed the river valleys, and rolled southwards and eastwards, they occasionally met with resistance; but there were no mounted archers of strange aspect as in the north to surprise and overwhelm them, nor was there any shock or antipathy in the general mode of life. The lines of development seem to have been as follows: an enterprising Chinese colonist gains the goodwill of a tribe and sets up as a chief, introducing (with his friends) into the tribe some system of administration, including the mysterious but all-important written character. Sometimes this state is quietly absorbed; sometimes it acquires a sort of semi-independence, and even blossoms out into a rival 'power', with a history of its own; but at no time within the past 3,000 years—the utmost stretch of genuine history—has China had any real or fundamental danger to encounter in or from the south.

As we have said, dated history only begins from 842 B.C. In the year 841 the emperor or king took flight, and a sort of republic was set up until the death of the fugitive in exile in the year 828, when the royal power was handed back to his heir: the term *kung-ho*, or 'republic', as now used, had actually been in vogue for a few years. But the old patriarchal power had gone for ever: it was no longer effective, and the half-dozen or so of 'great powers' among the numerous genuine Chinese states supposed to be vassal to the king intrigued and made war amongst themselves incessantly, occasionally making use as a catspaw of the king's government, and even taking temporary possession of his royal person. Meanwhile several of the mixed or half-Chinese communities in the south put in 'imperial' claims too, so that when Confucius conceived the idea of writing his celebrated Annals (covering the period 772–480 B.C.), he had to describe a restless state of affairs when the king was a sort of Vatican prisoner, and the refractory powers were struggling for pre-eminence just as they did at intervals in Europe as the old imperial Rome broke up. During this period China

had increased enormously in population, wealth, industry, and military efficiency; the country between the Yellow River and the Yangtse River valleys had gradually been either effectively absorbed or brought within the scope of Chinese culture, and at least three of the half-Chinese powers (roughly corresponding to immense areas around the modern Shanghai, Hangchow, and Hankow treaty-ports) had assumed aggressive attitudes, and even aspired to become kings or emperors instead of mere vassal nobles. It was during this restless energetic period that the old patriarchal faith or religion in China split off into two rival systems of political philosophy. This development was perhaps made easier by the gradual simplification of the writing art.

Confucius and Lao-tzŭ

Every one has heard of the Taoist and Confucianist teachings: as a matter of fact the two rival apostles who are commonly associated with these so-called religions were both merely interpreters, for political purposes, of the ancient *tao-tê*, or code of natural ethics. The elder apostle, Lao-tzŭ, was a bookish recluse in charge of the archives at the imperial or royal headquarters: despairing at the sight of so much bloodshed and self-seeking he advocated a kind of innocuous anarchy. Confucius, who occupied active ministerial posts at one of the most cultivated vassal or ducal courts, took the line of moral submission to the old monarchical idea, and even travelled about from court to court in order to try and convert the reigning vassals to his views. His own master, the reigning duke, was kinsman to the king. Both philosophers were unsuccessful in their lifetime, and the teaching of neither succeeded in establishing itself as a state engine until at least five hundred years after their death.

The Ch'in Dynasty and the First Universal Emperor

Meanwhile in the extreme west of China a mixed Tartar-Chinese power had been quietly developing a military *Kultur* of its own. Though it took part in most of the great ducal or

vassal durbars which from age to age debated and patched up or settled the imperial and vassal affairs of China, it was for 500 years 'officially' unrecognized as a member of kindred civilization: its isolated social position somewhat resembled that of Muscovy in the sixteenth century. But at last a great ruler arose who was not to be denied: by means of diplomatic intrigues and shifting alliances he succeeded at last in conquering one after another all the great Chinese states, including the much-reduced imperial or royal appanage. By the year 221 B. C. the new universal ruler had firmly set himself on the imperial throne as first *huang-ti* or 'august emperor' (of the world), decreeing that his successors were to be numbered ('second emperor,' &c.) and not personally named.

This great ruler was no figure-head in the hands of a military camarilla, but, whatever his faults, was an energetic man of initiative, and may indeed, not without truth, be designated the founder of the Chinese Empire as we have known it for 2,000 years. It is recorded of him that he personally perused and disposed of one hundredweight of official dispatches a day; but it must be remembered that 'documents' in those days were slabs of wood or bamboo strung together like tallies, so that one single dispatch or message might weigh anything from an ounce to a pound. Disgusted during his labours of reorganization with the wearisome arguments and protests of philosophers, peacemongers, and visionaries, he decided at last not only to destroy all the historical and contentious literature of China except what he thought useful books on divination, medicine, agriculture, &c., but also to get rid of all the learned men too. This was so effectively done that from that day to this the ancient 'classics' (as subsequently unearthed and deciphered) have never been quite trustworthy in detail.

Of course these summary acts of the First Emperor have earned for him the execration of posterity and blinded the orthodox to many of his more admirable qualities; nor is it difficult to believe that he really carried out his fell acts, for

in those days ' books ' were only owned by a very limited number of scholars at the different courts, and every man who owned so priceless a thing as a book could easily be identified and arrested. It was a case of producing it or effectively hiding it and denying it. This ruler unified weights and measures, reformed the laborious written character, standardized cart-axles, travelled all over the empire as far as the sea and the great lakes of Central China, repelled the Tartars, unified the Great Walls, sent generals out to conquer little-known regions in the south, and, generally speaking, centralized all administrative control. Of course, attempts were made to assassinate him, but he died a natural death in the year 210 in the course of his travels : thus the originality of his ideas had scarcely time to bring forth ripe fruit, and his son ' the second emperor ' was totally unable to digest what his powerful father had rapidly swallowed. The result, however, was that China was unified much as we now see it in so far as China Proper is concerned. Much of the south, which hitherto had only been known in the same vague way that Scandinavia, Russia, and North Europe generally were known to the Roman Empire at that date, was either explored, overrun, or conquered.

The Han Dynasties

Revolts soon broke out when the master-hand was removed, and discontented princes or generals found ready tools in the shape of the outraged populations. After several years of bloody warfare a commander, who had already earned the title of Prince of Han, succeeded in overcoming all rivals and establishing the Han dynasty with capital at a commanding centre now known as Sianfu, from which point both Tartars and Tibetans in the north-west and the recalcitrant tribes in the south-east could be simultaneously kept in check. It was to this ancient metropolis that the Emperor and his aunt-mother—the dowager—fled in A. D. 1900 in order to escape the immediate disasters consequent upon the so-called Boxer rebellion. The Han dynasty ruled the whole

of China, almost as we now know it, for 400 years, and rapidly consolidated the loose conquests of the First Emperor it had replaced: so brilliant were the general results that 'man of Han', 'Han language' to this day constitute the most usual and expressive way of translating our words China and Chinese.

In order to repel the Tartars more effectively, the fourth of the Han monarchs endeavoured to 'cut off their west arm' by allying himself with defeated rival nomads newly settled in the Oxus region. This move led to the complete conquest of the Tarim valley, the discovery of Parthia and India, and a wholesale drive westwards of the main bodies of Huns (as they were called when Western writers became increasingly aware of their menaces). Meanwhile, under the first three rulers of the new dynasty, Korea had been not only clearly discovered, but brought under control. Japan had sent messengers by way of the peninsula. The coast-trade, which up to the beginning of our era had been conducted by local agencies unknown to the real pulsating centre of China, became officially and definitely centred between what we now call Ningpo and Canton. The non-Chinese (but still of course monosyllabic and tonal) tribes of south-west China had been, if not subdued, at least forced to submit to peaceful penetration; and it was clearly understood that besides the ocean route there was a south-west land way through them to India, and thence again a second route to the Parthian or Persian regions.

It is extremely interesting to have in our possession in Paris and London innumerable wooden documents of this adventurous era of discovery: most of them were unearthed by Sir Aurel Stein, and they have been arranged and translated by the French specialist Chavannes, throwing with absolute precision a flood of light upon the Chinese military and economic organizations 2,000 years ago. We must not forget to add that the ancient ethical literature had been gradually found in various holes and corners, put together with the aid of old folks' memories, reduced to the simpler form of writing by this time in vogue, and largely increased, developed, and

commented upon by enthusiasts. In a word, China was now definitely established as a populous, civilized, industrious, and even conquering empire, capable of holding her own against all comers, and mistress of the world so far as she knew it: her pretensions in this respect were not less reasonable than those of the rival masters of an *orbis terrarum* in the Far West.

There was a revolution and a break of a few years in the Han rule at the opening time of our Christian era, which resulted in the transfer eastwards of the capital to the city in modern times called Honanfu: hence the historians distinguish between the Western Han and Eastern Han dynasties, each of about 200 years in duration. During the latter India was definitely discovered and Buddhism introduced. This latter important event was largely brought about through Chinese rivalry with the great Buddhist power established in the Hindu Kush region—the transformed Tartar power, in fact, with which China had previously 'cut off the Huns' right'. Taoism and Confucianism had both fallen into comparative neglect during the first two centuries of military discovery and foreign domination above described, but now, when they began to raise their heads as a political force once more, they saw themselves confronted in their own home with a rival foreign cult of a purely spiritual type, and in the consequent three-cornered struggle for existence both of them—more especially Taoism—had to compound with and even borrow from Buddhistic ideas.

Chinese power in the West gradually weakened during the 200 years of the Eastern Han dynasty, though the Hun-Tartar influence on the Chinese frontiers was further broken up, and for a time a successful rivalry was maintained in the Khotan-Kashgaria region with the rising Indo-Scythian (Kushan or Ephthalite) monarchy of Kabul—once more the Tartar emigrants who had moved south from the Oxus and replaced the Greeks. More was heard of the Syrian provinces of the Roman Empire by way of the now decaying monarchy of Parthia, and the progress of foreign sea trade, including the Roman, *via* Canton and Rangoon, began to throw a more

distinct light upon Ceylon, India, and their Buddhist and Brahmanistic connexions with Cochin China. The position of Japan in relation to Korea was geographically understood, but nothing was yet known of Formosa or Loochoo; very little of maritime Indo-China, Burma, or Siam (then called Cambodia), next to nothing of Yunnan, Tibet, the sources of the Yellow River (then confused with the Tarim), and the Yangtse River, still less of the vast region we now call Manchuria, and, indeed, despite expeditions, of the greater part of Mongolia. The main lines of Chinese advance were (1) the sea, (2) the rivers and lakes leading to the Shanghai and Canton outlets, and (3) the single great land road from Sianfu to Persia and Europe by way of the Tarim valley and Lob Nor.

The third 'edition' of the great Han dynasty was only able to maintain itself in Western China; south of the Yangtse a military adventurer succeeded in asserting the claims of the southern colonies, with their sea-power and foreign connexions, to a separate state existence. A second military adventurer ruled exclusively in the north, dealing with Japan, Korea, Manchuria, Mongolia, the Tartars, and the Ephthalites, whose king, Vasudeva, accepted from him a Chinese honorary title. This 'Three Kingdom Period' only lasted fifty years, and is full of interesting detail, counting indeed as the most chivalrous episode in Chinese history, and immortalized by a historical novel written, however, a thousand years later in the fourteenth century. But this division of Chinese state power, though possibly good for popular development, letting in as it did a flood of immigration, a healthy rivalry, and new ideas, had a disintegrating effect upon China as a weighty state organization. The position, in fact, was similar to that of the Roman state at about the same period, when the wholesale admission of 'barbarians' to an equal citizenship led to rival Gallic, German, and other aggressive state developments, to the ultimate division of the imperial power between Rome and Constantinople, and to general unrest and rivalry in the rest of Europe.

Three Centuries of Short Dynasties

The next three hundred years of Chinese history are altogether too complicated for more than a passing generalization here. The breaking up of the earlier and united Tartar power sent most of the Huns and Avars permanently towards the Volga. This movement somewhat freed the Tibetan hordes, the Manchu-Tungusic tribes, and even the Shan or Siamese organizations of the south-west (Yunnan, &c.) and the Annamese of Indo-China, with the result that Tartars, Tibetans, and Tunguses began to drive the pure Chinese southwards, and to arrogate to themselves titles as local 'emperors'. The Chinese spoken language thus affected by foreign influences developed under mixed populations into a current jargon etymologically far removed from ancient standards; and the idea of a South China as distinct from a North China became more and more permanent or accentuated. Thus the city we now call Nanking obtained permanent recognition as the headquarters of a sort of Chinese Byzantium. During these three centuries (A. D. 300–600) of involved strife and kaleidoscopic change China lost nearly all her land influence in the West, and the Tibetans (enlightened by Indian philosophy) and Turks (enlightened by Syrian letters) had opportunity to develop into menacing rivals for the possession of the Tarim valley: on the other hand, South China was considerably influenced by Indian and Cambodian civilization, and found in the South Seas generally plenty to compensate her for ignorance of what was going on in the north, where mixed and even foreign 'dynasties' (after the Visigoth, Ostrogoth, and Vandal counter-types) displaced and succeeded each other with bewildering rapidity, and where for a time genuine Turks and Tibetans reigned as Sons of Heaven in the most ancient capitals, just as rival Caesars set up in great cities like Paris or Cologne.

The T'ang Period

The great T'ang dynasty (roughly A. D. 600–900) put an end to this confusion, but had to fight hard for the possession

of the unified Chinese throne now once more established at Sianfu. The Cantonese to this day style themselves 'men of T'ang', speaking 'the T'ang language': in fact, the two conquering dynasties of Han and T'ang alone possess glorious memories. The latter did over again, but more thoroughly and intelligently, the conquering work of the former. Both Turks and Tibetans, it is true, occupied the Chinese capital for short periods even in T'ang times, but in the end cultivated persistency prevailed, and after 200 years of fighting both powers were driven off the Chinese frontiers for good. One branch of the Turks adopted the Persian religion of Manichaeus, and protected it in China if they did not introduce it: Pelliot has recently unearthed from the desert a hidden store of ancient books proving this quite clearly. Mussulmans made their first appearance in China; ambassadors from the Abbasside caliphs appeared at the court of China, and Arab troops even took part in various 'Siamese' and Ouigour-Turk campaigns on the southern and northern Tibetan frontiers. Christian missions from Syria shared in the privileges accorded to Islam and Persia; the eighth-century Nestorian stone still standing near Sianfu bears striking witness to the fact. Mongolia and Manchuria were both brought under some sort of control if not actually or administratively conquered: at one time even Persia and the Pamir regions were parcelled out and indirectly ruled under native kings or princes, and one Persian prince Feroze actually fled to China for protection against foreign enemies, a triangular duel between the Turks, Arabs, and China subsequently taking place for the possession of that kingdom. Balti was occupied about this time, but Tibet succeeded for some generations in imposing equality terms on China, the stone documents evidencing which were found still *in situ* at Lhasa by our punitory expedition of 1904–5. Nepaul was utilized, and through it a Chinese army marched to the temporary conquest of offending Indian territory. Cochin China, Loochoo, Japan, and Korea were all under the influence, educational and political, of the T'ang court.

The Sung Dynasty

Like all 'celestial' dynasties, native or Tartar, the house of T'ang gradually grew decrepit under corrupt court influences, and the various Tartar powers accordingly took the opportunity to recover themselves; for fifty years or more (900–960) a series of ephemeral dynasties, founded by *pronunciamento* generals, ruled in Old China, whilst the rest of the stricken empire became a prey to minor military adventurers who set up as kings at Canton, Foochow, Soochow, Nanking, Hangchow, and other places—sixteen in all—until at last, in 960, the soldiers of one capable general in the field acclaimed him as Emperor of all China with the dynastic title of Sung. The policy of the polished and highly literary Sung dynasty from first to last was to avoid foreign complications and to withdraw the frontiers to more natural limits. In an inglorious way this unenterprising policy succeeded, inasmuch as for 300 years the dynasty and its ruling classes managed to drag out a fairly comfortable if worried existence.

But powerful Tibetan and Tartar powers gradually rallied and formed a serious menace along the whole line of the great wall; China's political influence in High Asia, Turkestan, Tibet proper, India, Nepaul, Indo-China, Korea, and Japan almost entirely disappeared, and the Sung dynasty itself was at last driven over the Yangtse with capital at Hangchow.

The Yüan or Mongol Dynasty

This was its plight when Marco Polo was first at the court of Kublai Khan. The Mongol-Manchu Kitans (Polo's Cathayans) had gradually formed a North China empire from the Amur to Peking; after several centuries of rule the Manchu-Nüchêns (Polo's Djurdji) drove out their Cathayan overlords—part of whom fled west and founded the Karakitan empire in Persia—extended their Chinese conquests, and finally shared the whole of China with the Sungs (Marco Polo's Manzi, meaning 'southerners'). The vassal Mongols of the Onon River in due course revolted

against their Djurdji masters, just as the latter had done against the Cathayans, and taking possession of their whole empire, added to it their own deserts, and extended their further desert conquests to Persia, India, and Russia. The first few Mongol Khans controlled their vast possessions from Karakorum (near the modern Outer Mongol capital, Urga); but after the fourth Khan, Genghiz' grandson Kublai, succeeded to the throne in 1260, his generals set to work to conquer the Manzi empire too. By 1280 Kublai was firmly seated on his world throne at Cambaluc (Peking), which city had already been one of the chief capitals of the two other Tartar dynasties just mentioned for over 300 years.

Although Kublai's empire nominally extended over all the dominions dominated by the Han and T'ang dynasties, with the addition of much more both by land and by sea, his sway soon proved ineffective over his kinsmen and vassals in Russia, Persia, Turkestan, Manchuria, and even in the greater part of Tibet and Mongolia. He failed in his attempt to conquer Japan, a proud and sturdy country which, however ready to profit educationally by the facilities accorded to it under the T'ang and Sung monarchs of China, had as a matter of fact never paid real tribute with its polite missions, or consciously done real homage. None of Kublai's successors exhibited his capacity. Russian guards and Persian ministers were freely employed amongst various Tartars and miscellaneous foreigners by all the Mongol rulers, but very little was done for the material welfare or moral progress of the people of China, who ranked lowest in the official scale, and were accordingly quite ripe for revolt when an ex-Buddhist priest, hailing from Old China, placed himself at the head of the malcontents, and soon succeeded in driving the whole of the Mongol hordes back to their native deserts.

The Ming Dynasty

In 1368 a native Chinese dynasty was then once more on the throne at Nanking (i.e. 'southern metropolis'), the emperor's ablest son ruling as a sort of viceroy at Peking (i.e.

the ' northern metropolis '). The leading political features of this native dynasty of Ming (' Bright ') were (1) incessant struggles with all branches of the Mongols along the whole line of the Great Wall—in fact, a third edition of the Han struggles with the Huns and the T'ang struggles with the Turks ; (2) a vast extension of China's sea influence and trade as far as the coasts of Africa and the Red Sea, the Persian Gulf, the Indian and South Seas, and at last Formosa ; (3) relations with Tamerlane and several other rulers in the Persian world ; (4) the entire disappearance of all record concerning Christianity, Islam, Manichaeism, mediaeval Europeans including Russians, and Manchuria. Japan was at first supposed to pay tribute, but in reality harried the Chinese coasts unmercifully for 200 years : China's seclusion really begins with the later and weaker rulers of the Ming dynasty, one of whose emperors was even carried off to Tartary by the enterprising Mongols. The Mings, however, got to know much more of Tibet, from a diplomatic religious point of view, than any previous dynasty had done, though the priestly rulers at Lhasa knew well how to maintain their own administrative independence, besides carrying their religious influence for their own purposes into Mongolia, and thus acquiring a political weight in China that has endured ever since, and still counts for much.

Eunuchs and court favourites undermined the ruling capacity of the Ming dynasty as they had that of most other Chinese dynasties. Weakened already by costly and incessant struggles with the Mongols, the incapable frontier generals were scarcely aware of even the existence of the Manchus—a petty branch of the once powerful Djurdji—until this organized military race suddenly came knocking at the northern door, armed with nothing more formidable than powerful bows and arrows. Towards the close of the Ming dynasty, Italian, French, and other Jesuits, following in the wake of Portuguese, Spanish, and Dutch trading corsairs, had succeeded in establishing themselves in China, and even at Peking, where their services were found useful in correcting

the Arab calendar, of which the northern Chinese had made use for many centuries. Some of these Jesuits instructed the Ming generals in the use of firearms, which had been neglected for centuries in both China and Tartary, notwithstanding that Kublai Khan had imported them from Persia, and used them with effect during his conquest of China.

The Ch'ing or Manchu Dynasty

When subsequently the Manchus gained possession of the Ming throne, the same Jesuits were equally accommodating to their new masters. The Manchu conquest was a result of universal tyranny and peculation. Rebellions broke out, and one formidable leader succeeded in making his way into Peking; the Emperor committed suicide, and one of the Emperor's generals against the Manchus then conceived the desperate idea of inviting the well-organized enemy to accept service against the rebels. No sooner were the Manchus in Peking than, under pretext that there were no direct imperial heirs left, they announced themselves as the manifestly chosen of Heaven. Thence they proceeded cautiously, step by step, to the conquest of China, securing the co-operation of the best Chinese generals and their armies by liberal treatment, and even by enrolling large bodies of pure Chinese in the Manchu military organization, thus placing this limited branch of them, like genuine Manchus, beyond the civil law. The only 'tyrannical' act the Manchus indulged in on a large scale was making the use by men of the Tartar queue or 'pigtail' compulsory under pain of death. The eastern Mongols had been cajoled over, and Korea politically subdued before the entry into Peking. China Proper once reduced, the Manchus proceeded to the organization of Formosa, hitherto only vaguely known as the resort of pirates, Chinese, Dutch, Japanese, or other; then to the reduction of the western Mongols and Turkestan, making use of the Dalai Lama's religious authority whenever it suited them. Simultaneously with the Manchus the Russians appeared on the scene, but were outmatched by the Manchus both in arms and diplomacy,

and kept at arm's length for 200 years, i. e. till 1860. Tibet proving recalcitrant, Manchu armies succeeded (for the first time in imperial history) in imposing the Emperor's will upon Lhasa, and, in order to check Mongol intrigue, even the souls of lamas and saints were only allowed to be 're-embodied', subject to Manchu approval, in children of harmless families.

Nepaul coming to blows with Tibet was, 150 years ago, practically conquered, and made tributary under an easy-going arrangement which endures to this day. Manchu influence can scarcely be said to have passed either the Himalayas or the Pamirs, though on various occasions of Mussulman Khodjo rebellion the weight of the Peking hand has been felt in Kokand, Badakshan, Bokhara, Balti, &c. India has from first to last been politically ignored, and Japan most prudently left severely alone, this aloofness being reciprocal previous to 1870. Annam, Tonkin, Laos, Siam, and Burma have all at different periods experienced military or diplomatic pressure, but in these directions Manchu arms have never gone beyond more or less serious demonstrations, from which they were generally content to retire with the empty reward of more or less voluntary tribute. Korea was faithful throughout to the Manchus, as she had been to the Mings.

II. Recent History

Manchu conquests in the seventeenth and eighteenth centuries—Revolts in the reign of Chia Ch'ing—The English factories and embassies—Insurrection in Kashgaria—The first China war—The T'ai-p'ing rebellion—The second China war—Suppression of the T'ai-p'ing rebellion—Mohammedan rebellions—The Tientsin riot—The Chefoo Convention—Reconquest of Kashgaria—Opening of Korea—The French in Tonkin—The war with Japan—Foreign spheres of influence and the 'Open Door'—Resumption of power by the Empress-Dowager—The Boxer Rising—The Russo-Japanese war—Modern reforms—Accession of the last Manchu emperor—The Revolution of 1911 and foundation of the Chinese Republic—Table of the Chinese dynasties.

Manchu Conquests in the Seventeenth and Eighteenth Centuries

After the great rebellion of the Three Vassal Princes, which spread through eleven provinces and was only crushed by

the coolness and determination of the Emperor K'ang Hsi, China enjoyed a lengthy period of peace and prosperity, as evidenced by an enormous increase in population. In 1683, Formosa was finally subjugated, and a year or two later, after some fighting on the Amur, the Russo-Chinese frontier was defined by treaty. Several wars were waged against the tribes of Inner and Outer Mongolia—Khalkhas, Dzungars, and Eleuths—which resulted in the establishment of Chinese authority over the whole of that vast region. Burma and Tibet were also invaded and brought under Chinese suzerainty; and finally, under the Emperor Ch'ien Lung, came the conquest of Eastern Turkestan, known as Sinkiang or the New Dominion. But all these were external wars little felt by the nation at large, especially as under the careful administration of Ch'ien Lung and his predecessors taxation was light and the treasury full to overflowing. There were troubles with the Miaotzŭ aborigines of the south-west in 1735 and 1739, and again with the border tribes of West Szechwan in 1746; but as a whole the eighteenth century was a period of tranquillity almost unexampled in Chinese history.

Revolts in the reign of Chia Ch'ing (1796–1821)

No sooner, however, had the firm hand of Ch'ien Lung been withdrawn by his abdication in 1795 than an era of insurrection began, which with but few intermissions may be said to have lasted until the closing years of the Manchu dynasty. First came another widespread revolt of the Miaotzŭ in Kweichow and Hunan, which was put down with great difficulty owing to the mountains and forests covering that part of the country. A more serious rebellion, however, was that fomented by the White Lily sect, a secret society which had originally been founded in opposition to the Mongol domination, and was now revived in order to get rid of the Manchus. It broke out in western Hupeh in 1796, and for nearly nine years taxed China's resources to the utmost. At one time or another the rebels were conducting campaigns in Hunan,

Szechwan, Shensi, and Kansu, and the conflict was greatly prolonged by the corrupt dealings of the powerful Manchu minister Ho-shên. It was finally brought to an end by Generals Galehtengpo and Teoutai. About this time pirates were a constant source of danger to shipping, and one buccaneer named Ts'ai Ch'ien sailed up and down the coast for years, preying upon Chinese commerce, until his ships were surrounded and sunk near Amoy. In 1813 one of the leaders of the Heavenly Reason Society, in league with the eunuchs, made a bold attempt to get possession of the Forbidden City in the Emperor's absence. At the same time another party was to attack Peking from without. The plot failed, but serious risings took place in several cities of Chihli and Shantung.

The English Factories and Embassies

While the Manchus were struggling with internal rebellion, their relations with the Western Powers, especially Great Britain, were becoming more and more embittered. The Portuguese and the Dutch were the first European traders to reach China, but though the former settled down in Macao, and the latter gained temporary possession of Formosa, the Chinese Government had but little serious trouble with either. The English, on the other hand, were less complaisant in yielding to Chinese pretensions, and innumerable causes of friction occurred. In 1685 the East India Company succeeded in establishing a ' factory ' (i. e. the residence and office of a factor) for trading purposes at Canton, and the year 1720 saw the birth of the Co-hong (literally, ' public firm ') system at the same place. This was an organization of native merchants to regulate the prices of commodities in their own interest, and it soon received official backing. Later on, it became a purely Government organization, the merchants assuming control and serving as sole intermediaries between the Chinese Government and the foreign traders. In this form the system continued until the Treaty of Nanking in 1842. With a view to redressing numerous grievances and

placing trade on a more satisfactory basis, Lord Macartney was sent as British Envoy to Peking, where he arrived in August 1793. He was received with great civility, but not a single item of business was even discussed. Lord Amherst's embassy in 1816 met with even less success, being denied an audience and summarily dismissed from Peking.

Insurrection in Kashgaria (1825–30)

In 1820 the Emperor Chia Ch'ing died, and left both his throne and his misfortunes to his second son, who took the name Tao Kuang. The new Emperor was superior in moral character to his father, but unfortunately inherited his prejudice against foreigners. The first part of his reign was occupied with a war for the possession of Kashgaria. Jehangir, a member of the old Khoja family of Kashgar, took advantage of the discontent prevailing amongst the Mohammedans of the country to advance his own claims to the throne. He was energetically seconded by Mohammed Ali, Khan of Khokand, and also secured the support of the Khirgiz. The first campaign turned out unfavourably for Jehangir, but in 1826 he entered the disputed territory with a large army at his back and proclaimed himself Sultan ; six months later the Chinese returned in force and retook Kashgar. The war was renewed in 1828, when Jehangir was taken prisoner and sent to his death in Peking. China had still to reckon with Mohammed Ali, whose army invaded Kashgaria in 1830, but eventually peace was concluded with concessions on both sides, and Khokand promised to restrain the Khoja princes in her territory.

The First China War and the Treaty of Nanking (1842)

With the expiration of the East India Company's charter in 1834, and the appointment of Lord Napier as Superintendent of the China trade, a quarrel with England arose which ended at last in open war. The nominal cause was the trade in opium, which China was anxious to stamp out, not

so much on moral grounds as on account of the alarming efflux of silver which it involved. But the real cause of the conflict lay deeper. With the growth of intercourse between Europe and the Far East it had become an imperative necessity to break down the high wall of obstinacy and arrogance with which China had encircled herself. The Opium War was only the beginning of a struggle which lasted for 20 years, and it was fought to decide the national and commercial relations which should exist between the East and the West. On proceeding to Canton without the usual application to the hong merchants Lord Napier found himself denied access to the Viceroy, and was obliged to retire to Macao, where he died shortly after. Captain Elliot became Superintendent in 1836. He was permitted to reside at Canton, but in spite of his conciliatory attitude there was interminable wrangling and bargaining throughout his tenure of office. Commissioner Lin arrived at Canton in 1839, and at once seized and destroyed 20,000 chests of opium, also requiring every foreign merchant to bind himself under pain of death not to engage in the opium trade for the future. Elliot objected, whereupon Lin retorted by cutting off supplies. The British retreated to Hongkong, and hostilities commenced. In the spring of 1840 large military and naval forces were assembled off the coast under Sir George Bremer, who occupied Chusan, and was only kept away from Peking by the diplomacy of Ch'i-shan. The Bogue forts at the mouth of the Canton River had to be taken three times within a few months, and the city of Canton was on the verge of capture before the authorities realized the hopelessness of the situation and agreed to pay a ransom of six million dollars. Thereupon the British withdrew; but the question of further intercourse was still unsettled, and Sir Henry Pottinger, who had superseded Captain Elliot, determined to carry the war into the north. A number of towns along the coast were taken in quick succession, and preparations were made for an expedition up the Yangtse. Brave though fruitless resistance was offered at Woosung and Chinkiang, but when Nanking was reached in August 1842 the

Chinese at last gave way, and a treaty of peace was signed in that month. Five coast towns (Canton, Amoy, Foochow, Ningpo, and Shanghai) were to be opened to foreign trade, Hongkong was to be ceded, and an indemnity of $21,000,000 paid to Great Britain, and official correspondence was henceforth to be conducted on equal terms. It was soon obvious, however, that the Chinese had not really learned their lesson : outrages and disturbances were still frequent, and more than once it needed all the sagacity of the Manchu High Commissioner Ch'i-ying to avert an open rupture.

The T'ai-p'ing Rebellion

The Emperor Tao Kuang died in 1850, and was succeeded by his fourth son Hsien Fêng, a youth of nineteen, who continued the short-sighted conservative policy of his predecessors. Just about this time a rebellion broke out in Kwangsi which was destined to have momentous results and to bring the Manchu dynasty within an ace of destruction. A religious crusade in its inception, started by a quasi-Christian fanatic called Hung Hsiu-ch'üan, it soon found itself in collision with the Government, and met at first with scanty success. Lack of food determined the rebels in 1852 to make a move towards the richer provinces of the north, and passing over the border of Kwangtung into Hunan they captured a number of cities along the Hsiang River. Though unable to take Changsha they continued their march to the Yangtse, crossing the Tung-t'ing Lake and storming the important cities of Wuchang and Hanyang. Then, sailing down the Yangtse, they were soon in possession of Anking, and in March 1853 they seized Nanking itself, which was to be their capital and chief stronghold for the next eleven years. Hung Hsiu-ch'üan now proclaimed himself *T'ien Wang* or Heavenly King, and inaugurated the T'ai-p'ing dynasty. Four assistant Wangs or Princes were appointed to control the civil administration and take command of the armies ; their number was afterwards enormously increased. A strong force was immediately

sent north to make an attempt on Peking, but was brought to a standstill in the neighbourhood of Tientsin, and ultimately compelled to return to Nanking in 1855. Meanwhile the Imperialists gradually ousted the rebels from most of the towns on the Yangtse, so that at last they were confined to a narrow strip of country between Anking and Nanking, both of which cities were closely beleaguered. The native city of Shanghai was in the hands of the rebels for a year and a half, but was finally recaptured with the aid of the French. By 1858 the whole rebellion had been got well in hand and would probably have collapsed but for the outbreak of a second war between China and Great Britain.

The Second China War and the Treaty of Tientsin (1860)

The free entry into Canton, secured by the Treaty of Nanking, was still denied to foreign traders, and Yeh Ming-shên, the bigoted and ignorant High Commissioner, formed the only channel of communication by which the Government could be approached. Under such circumstances a renewal of hostilities was almost inevitable, and the occasion was given when, in October 1856, a lorcha or Chinese-rigged vessel flying the British flag was boarded in the Canton river, the flag hauled down and the whole crew carried off. Redress was refused, so the English seized the Bogue forts and bombarded Canton itself. The Indian Mutiny having necessitated the diversion of troops intended for China, further operations were delayed until December 1857, when the city was captured by a joint naval expedition from England and France, and Commissioner Yeh made prisoner. In the following summer the Taku forts were taken without much difficulty by the Allied fleets, and the Treaty of Tientsin was signed on June 26. It was agreed that a British Minister should reside at Peking and that foreigners should be permitted to travel in the interior; an indemnity was exacted, and five new ports were to be thrown open. The question of the Customs Tariff was settled at Shanghai a few months later,

an important feature being the legalization of the opium trade. A regrettable incident of the negotiations at Tientsin was the disgrace and suicide of the honest and liberal-minded Ch'i-ying.

In the following year the ambassadors sent to exchange the ratifications of the Treaty found the mouth of the Pei Ho blocked, and they were requested to travel to Peking by another route commonly used by envoys bearing tribute. Instead of complying Admiral Hope attempted to force a passage with thirteen gunboats, with the result that two were sunk and a large number of men killed and wounded. A formidable expedition of 20,000 men was now equipped by England and France, and landed at Pehtang on August 2, 1860. The Mongolian cavalry under Prince Sengalintsin having been dispersed, the Taku forts were taken in the rear and captured after stubborn resistance. The Allied fleet then moved up the river to Tientsin, and an advance was made on Peking. An ambuscade prepared by the Chinese at Tung-chow was a failure, but the interpreter Parkes and a small party of foreigners fell into the enemy's hands while trying to arrange an armistice. They were tortured and carried to Peking, the survivors not being returned until two more battles had been fought at Changkiawan and Palikiao and the French had taken possession of the Emperor's summer palace, which was ruthlessly plundered and burnt.

On October 13 Peking was for the first time occupied by European soldiers, and a new treaty was concluded there with Prince Kung, the Emperor having fled to Jehol. The war indemnity was increased to eight million taels for each of the Allies; Kowloon, on the mainland opposite Hongkong, was ceded to Great Britain, and Tientsin was added to the list of open ports. A clause in the French treaty gave Catholic missionaries a right to own property in the interior of China. At the same time Russia demanded and obtained as the price of her mediation the Trans-Ussuri territory on the north-east of Manchuria. Hsien Fêng died shortly afterwards, when the Court returned to Peking, and Prince Kung by a *coup d'état*

secured the control of the government to himself and the two Empresses-Dowager, Tz'ŭ-an, the Emperor's widow, and Tz'ŭ-hsi, the mother of the boy-emperor T'ung Chih. The Tsungli Yamên or Chinese Foreign Office was created, and remained for the next forty years a body second only in importance to the Grand Council.

Suppression of the T'ai-p'ing Rebellion (1864)

Meanwhile the T'ai-p'ing Rebellion had taken on a new lease of life, owing partly to the other embarrassments of the Government and partly to the rise of two skilful leaders, Ying Wang and Chung Wang. In 1858 the former retook Lüchowfu in Anhwei and inflicted a crushing defeat on the Hunanese volunteer army at Sanho. In spite of these successes the general outlook was not promising for the rebels, for the siege of Nanking was being pressed more vigorously than ever, and at the beginning of 1860 its fall seemed imminent. At this critical moment Chung Wang by a clever ruse succeeded in drawing off part of the investing forces, and then, in concert with the defenders of the city, fell upon the weakened remnant of the Imperialist army and routed it with great slaughter. Thus the siege was raised, and in a very short time the rebels had overrun nearly the whole of South Kiangsu and North Chekiang, capturing the important cities of Soochow and Hangchow, and seriously threatening Shanghai. Here, however, they met with a stubborn resistance, and it was the failure of their efforts at this point that really led to their ultimate ruin.

A small force of Europeans and Manila men for the defence of Shanghai and the reconquest of the surrounding territory was organized by the American, Ward, who was victorious in many small engagements. Later on the 'Ever Victorious Army', as it was called, was composed mostly of Chinese troops officered by Europeans. Though it seems never to have comprised more than 5,000 men, it played a considerable part in the suppression of the rebellion. Tsêng Kuo-fan, the

hero of the Hunanese army, was now made Viceroy of Liang-kiang (Kiangsu, Anhwei, and Kiangsi), and set to work to reduce Anking in order to regain control of the Yangtse. Its fall, in September 1861, was perhaps the turning-point of the war. Shanghai and its neighbourhood being still in danger, an army for its defence was raised in Anhwei by Li Hung-chang, who henceforth worked in co-operation with Gordon, the new commander of the Ever Victorious Army. One by one the rebel strongholds in South Kiangsu were recaptured, until at last, in November 1863, Soochow itself was completely invested. The city capitulated, and the Wangs defending it were treacherously put to death by Li Hung-chang, which caused Gordon temporarily to resign his command. Nanking was desperately defended by Chung Wang to the last, and after its capture in July 1864, though desultory fighting still went on in several provinces, the great T'ai-p'ing Rebellion was practically at an end. T'ien Wang took poison, and his young son was put to death.

Mohammedan Rebellions in Kansu, Shensi, and Yunnan (1867–73)

Though the Manchus had weathered the most perilous storm that ever threatened their dynasty the next few years were by no means peaceful. Even while the South was in the throes of rebellion mounted bandits, known as Nien-fei, were causing much trouble in the provinces of Shantung, Hunan, Anhwei, and southern Chihli; and it was not until 1868 that they were finally suppressed by the exertions of Tsêng Kuo-fan, Li Hung-chang, and Tso Tsung-t'ang, a brilliant protégé of the first-named. Two Mohammedan insurrections, both of a formidable character, next claimed attention. One of these raged for eleven years in Shensi and Kansu, and was crushed at Suchow in 1873 by Tso Tsung-t'ang. The other, known as the Panthay Rebellion, broke out in 1867 in Yunnan. The Panthays were a Mohammedan tribe who, taking advantage of the T'ai-p'ing troubles, had gained complete possession of

western Yunnan, and made Talifu their capital under the rule of Tu Wên-hsiu, better known as Sultan Suleiman. Reduced to extremities in 1873, Tu Wên-hsiu gave himself up to the Chinese on condition that his subjects should be spared. The promise was violated, and a terrible massacre ensued.

Tientsin Massacre (1870)

In June 1870 there occurred in Tientsin the most serious anti-foreign riot that had yet taken place. It was provoked by unfounded rumours of the kidnapping of children by the Sisters of Charity belonging to the Roman Catholic Orphanage, and altogether some twenty foreigners were killed. Compensation was exacted, and a high official was sent to make apologies to the French Government.

The Chefoo Convention (1876)

The Emperor T'ung Chih died in January 1875, and the Empress-Dowager Tz'ŭ Hsi proclaimed as his successor the infant son of Hsien Fêng's youngest brother, thus securing to herself another long lease of power. When Kuang Hsü came to the throne China was once more on the verge of war with Great Britain owing to the murder of Margary, a consular official who had been sent to open up a trade route between Yunnan and Burma. After prolonged negotiations, however, the Chefoo Convention was drawn up and signed in September 1876 by Li Hung-chang and Sir Thomas Wade. An indemnity was paid, and several more ports were opened to consular residence and trade. In the same year a railway was built between Shanghai and Woosung, but it was purchased and torn up by the Chinese Government.

Reconquest of Kashgaria (1877)

Ever since the fall of Suchow Kan in 1873 great preparations had been made for a campaign to recover Kashgaria, which had been seized by the Mohammedan leader Yakoob Beg. In 1876 Tso Tsung-t'ang began his wonderful advance through

the heart of Central Asia, and in the following year the Chinese armies reached Kashgar, having succeeded in beating down all opposition and reconquering the whole of the New Dominion. A demand was now made for the return of Ili, which Russia had occupied with a promise to restore it to China as soon as she was capable of maintaining order. The envoy to Petrograd, however, concluded such an unfavourable treaty that he was actually sentenced to death, and negotiations had to be re-opened by the Marquis Tsêng, son of Tsêng Kuo-fan, whose diplomacy eventually regained nearly the whole of the disputed territory for China.

Opening of Korea (1875)

A new menace to peace now began to loom upon the horizon. After centuries of seclusion the ' Hermit Kingdom ' of Korea had been thrown open to external trade and intercourse in 1875, since when two bitterly hostile factions—the pro-Japanese party of progress and the conservative party which still looked to China for protection—had been struggling for mastery. Armed conflicts took place in 1882, and again in 1884 ; on both occasions the Japanese Legation was burned, and the minister forced to fight his way from Seoul to the sea. For each of these outrages an indemnity had to be paid, and an agreement was made between Japan and China that neither country was to send an armed force into Korea without informing the other.

The French in Tonkin (1884–5)

At the same time complications arose in the south. The French had been exerting steady pressure on Tonkin, lying between Annam and China, until in 1884 they annihilated a body of irregular Chinese troops, known as the Black Flags, in the battle of Bacninh, and were in their turn severely repulsed at Langson. Admiral Courbet at once proceeded to blockade Formosa, and sailing up the Min river destroyed a fleet of eleven Chinese warships in front of Foochow Arsenal,

The state of reprisals that followed (for war was never formally declared) lingered on until June 1885, after some inconclusive fighting in Formosa and Tonkin. No indemnity was paid, but the Chinese gave up all claim to Tonkin. One consequence of these hostilities was that a number of reforms were introduced into the Chinese army and navy. The customs service under Sir Robert Hart was greatly developed ; and telegraphic communication was established between Yunnan and Peking. In 1886 the Chinese claims on Burma were relinquished. For a few years after the war with France China showed some signs of an awakening ; but with the death of Prince Chun, father of the emperor, and other enlightened statesmen, a period of reaction set in. Anti-foreign feeling reached a high pitch in the Yangtse Basin, and in 1891 rioting broke out at several places in Kiangsu and Anhwei.

The War with Japan (1894–5)

Meanwhile, the unrest in Korea was steadily growing. A religious sect known as the Tong Haks had arisen in much the same way as the T'ai-p'ings in China, and by 1894 they were openly defying the authority of the Government. Korea having appealed to her suzerain for help, China responded by sending men-of-war and troops to the country, a move which was immediately countered by a much larger expedition on the part of the Japanese. The question was soon narrowed down to this : which of the two rival powers should withdraw her troops first ? Japan insisted upon a complete reorganization of the Korean government, but China would not agree ; and while negotiations were in progress the Japanese sank the transport Kowshing as it was bringing Chinese reinforcements to Korea. War now began in earnest, and in September a large Chinese army was routed at Pyeng-yang and driven back across the Yalu river. A few days later the hostile fleets met near the mouth of the same river, and after a stubborn fight, in which four Chinese cruisers were sunk, the shattered remnant fled to Port Arthur. This important fortress and

naval base was soon after captured with astonishing ease, pointing to treachery, and another battle resulted in the loss of Weihaiwei in Shantung, with the remainder of the Chinese fleet. The gallant Admiral Ting committed suicide immediately after his surrender.

The veteran statesman Li Hung-chang was sent to Shimonoseki to sue for peace, which was concluded in April 1895. The terms were severe, though probably less so than they would have been but for a murderous attempt on the envoy by a Japanese fanatic, which gained him much sympathy. Korea was declared independent; the Liaotung Peninsula and the island of Formosa were ceded to Japan; a war indemnity of 200 million taels was exacted, and new treaty ports were opened to commerce. Russia, however, intervened, and backed by Germany and France, while England stood aloof, forced Japan to return the Liaotung Peninsula to China, and to accept an increased indemnity as compensation.

Foreign Spheres of Influence and the 'Open Door'

Of all China's foreign wars the one with Japan had the most disastrous effects. It swept away her equipment as a military power, reduced her prestige to the lowest ebb, and revealed her weakness to the world. The next five years were full of internal unrest and anti-foreign agitation. Germany seized Kiaochow, with the excellent harbour of Tsingtau, as compensation for the murder of two of her missionaries; Russia obtained the lease of Port Arthur; Weihaiwei was leased on the same terms to Great Britain, and Kwangchowwan (opposite the island of Hainan) to France. In addition each great Power had a part of China earmarked for exploitation. Germany's 'sphere of influence' was Shantung, Russia claimed all railway concessions north of the Great Wall, Great Britain was to be supreme in the Yangtse Valley, and France secured similar privileges in Yunnan and Kwangsi. In 1899, however, the policy of the Open Door, having for its object the maintenance of China's integrity and the assurance

of equal rights to all throughout the Empire, was successfully established by the United States backed up by the British Government.

Resumption of Power by the Empress Dowager (1898)

In the summer of 1898, at the height of the alarm caused by foreign aggression, a succession of drastic reform edicts was issued by the Emperor Kuang Hsü, who had come under the influence of the Cantonese leader of the progressive party, K'ang Yu-wei. It was decreed that the old classical examinations for the Government service should be profoundly modified by the introduction of ' western learning ', that temples and monasteries should be converted into public schools, that many superfluous offices both within and without the capital should be abolished, and the military system completely reorganized. In dire dismay the place-holders and supporters of the old régime turned to the Empress-Dowager, who was living in retirement. Having secured the co-operation of the army, she suddenly returned to Peking, seized the person of the Emperor, whom she forced to sign an edict announcing his own abdication, and assumed the regency herself. All the reforms were rescinded by a stroke of the pen, and all persons connected with the new movement were outlawed. Six of the reformers were summarily executed, but K'ang Yu-wei escaped to Hongkong.

The Boxer Rising (1900)

After this closing of the safety-valve of constitutional reform an explosion was inevitable. Smarting under their wrongs the people of Shantung began to organize, and a fanatical sect calling itself *I Ho Ch'üan* (The Patriotic and Harmonious Fist), known to foreigners as the Boxers, sprang into prominence. Their original purpose was to drive out the Manchus and to replace them by a Chinese dynasty, but under the skilful manipulation of the Empress-Dowager all their violence was turned against the hated foreigner and his

works. They were armed for the most part with swords and spears, and gave themselves out as invulnerable. When Yüan Shih-k'ai was made Governor of Shantung he took his division of foreign-drilled troops with him, and soon made things so uncomfortable for the Boxers that they migrated into Chihli and Shansi, spreading terror and destruction as they went. Towards the end of May 1900 the situation in North China had become very critical. Telegraphs and railways were torn up, Tientsin was threatened, and the Legations at Peking were entirely cut off from the outer world.

An attempt to reinforce the Legation guards was made by Admiral Seymour in June, but he was compelled to fall back on Tientsin with heavy losses. The Taku forts were taken after a severe engagement by an allied squadron of warships, and the foreign settlement at Tientsin was relieved in the nick of time. The native city was then carried by assault, and preparations were made for an advance on Peking, which, however, was unable to start until the beginning of August. Meanwhile the situation in Peking had become very grave. The whole city was practically in the hands of the Boxers, and the Legations were subjected to a fierce though intermittent bombardment. The Government was at the mercy of Prince Tuan and the extreme war party, and the more far-seeing statesmen could only counsel moderation at the peril of their own lives. It was due to them, however, that the full strength of the army was not concentrated on the attack, and that the besieged were from time to time supplied with fresh provisions. The taking of the Taku forts led to a declaration of war against the invaders, and all the foreign Ministers were ordered to leave the capital within twenty-four hours. Fortunately, the fate of the German minister, who was shot dead in the street on his way to the Tsungli Yamên, determined the rest to refuse compliance, and the siege went on until August 14, when the relief expedition, consisting of 15,000 men, arrived before the walls of Peking, which was occupied on the following day. It was generally acknowledged that the honours of the defence of the Legations rested with the

Japanese contingent under Colonel Shiba, who held a vital and exposed part of the position with the utmost skill and tenacity.

Thanks to the sagacity and good faith of the Viceroys, especially in the Yangtse provinces, who disregarded the instructions they received from Peking to exterminate all foreigners, the Boxer rising was restricted almost entirely to Shansi and Chihli, while the rest of China remained comparatively quiet. On the approach of the allies the Emperor, the Empress-Dowager and their entourage fled to Taiyüanfu and thence to Sianfu, which they reached after suffering many hardships. On their return to the capital at the beginning of 1902 it was clear that the Empress-Dowager had taken her lesson to heart, for she reversed her former policy and energetically embraced the cause of reform. After the capture of Peking the city was largely given up to plunder, and the people were treated with much needless barbarity by some of the foreign troops. The terms of the peace protocol which followed were on the whole less harsh than China had reason to expect, though a heavy indemnity was demanded and eleven of the chief culprits were sentenced to death.

The Russo-Japanese War (1904–5)

The dismemberment of the country, however, was averted, in spite of the ominous action of Russia, who insisted on keeping her troops in Manchuria ' until order should be restored '. It soon became evident that she had no intention of evacuating the territory she had occupied, and Japan was driven to demand the fulfilment of her pledge. Russia temporized, and delayed so long in coming to any agreement, even on the respective spheres of influence of the two countries in Korea, that at last the patience of Japan was exhausted.

On the night of February 8, 1904, Admiral Togo attacked the Russian fleet at Port Arthur, sinking two ships and disabling several others. This initial success was followed by an almost unbroken series of Japanese victories by land and

sea. Port Arthur surrendered on January 1, 1905; the Russians were driven back in the battles of Liaoyang and Mukden; and the Baltic fleet, Russia's last hope, was annihilated in the battle of the Sea of Japan, fought on May 27. In the Treaty of Portsmouth, concluded shortly after, Japan gained all the chief objects for which she was fighting: her influence in Korea was declared to be paramount, and Manchuria was to be restored to China.

Modern Reforms

The moral effect of the Russo-Japanese war on the Chinese people was enormous. The demand for reform now became universal, and most of the measures which had led to Kuang Hsü's deposition in 1898 were revived in an even more radical form. One of the most important of these was the entire abrogation of the old examination system and the substitution of schools of different grades and education on modern lines. Translations of foreign works were multiplied, and students were encouraged to seek instruction abroad, in Europe, the United States, and especially Japan. A scheme of military reform was outlined in an Imperial edict, and in 1905 a constitution was promised as soon as the people of China were ready for it. The various departments of State were also reorganized from top to bottom, railways were constructed, the postal and telegraphic systems were taken over by the Government and greatly extended, and stringent edicts were issued against opium and foot-binding, with remarkable results in each case.

China was indeed awakening at last; yet these reforms came too late to save the Manchu dynasty which had brought such unexampled humiliation on the country. The spirit of patriotism, hitherto singularly lacking in the Chinese, had been kindled by national disaster, and the people were indignant when they realized how they had been hoodwinked and misled by their rulers. Anti-foreign agitation gradually died away after 1900, and it became the principal aim of Chinese

patriots to get rid of the Manchu incubus. It is true that the yellow labour question, leading to a boycott of American goods in 1905, threatened China's friendly relations with the United States, but the effect was only temporary. Serious riots and anti-dynastic uprisings in all parts of the country were of constant occurrence in 1907; most of them were fomented by the great revolutionary league called the T'ung Mêng Hui, founded by Dr. Sun Yat-sen, Huang Hsing, and others.

Accession of the Last Manchu Emperor (1908)

In November 1908 the Emperor and Empress-Dowager died within a few hours of each other, and the throne passed to the infant Pu I, whose reign-title was Hsüan T'ung. The next three years saw a return to absolutism under the mask of constitutional reform. The Regent dismissed Yüan Shih-k'ai from office and inaugurated a period of unrestrained Manchu supremacy. Neither the Provincial Assemblies, convoked in 1909, nor the National Assembly, which met for the first time in the following year, possessed any real authority whatsoever, and the election of a parliament was indefinitely postponed.

The Revolution of 1911 *and Foundation of the Chinese Republic*

The fateful year 1911 opened with an abortive insurrection at Canton, suppressed with great rigour. The nationalization of the Canton–Hankow and Chengtu–Hankow railways involved the borrowing of £4,000,000 from foreign nations, and the people resented the fresh burden about to be placed on their shoulders. Destructive floods in Szechwan increased the discontent, and ere long the province was in rebellion from end to end. In October the accidental explosion of a bomb at Hankow led to the premature outburst of a carefully planned revolution. The insurgents under Li Yüan-hung started with Hankow, Hanyang, and Wuchang in their

possession, and the movement soon spread far and wide throughout the Empire. Yüan Shih-k'ai was recalled in haste to Peking and entrusted with full powers to deal with the situation. This act sealed the doom of the Manchu Court. For although the raw recruits of the revolutionary forces were no match for the northern army, and Yüan had the game in his own hands, he was by no means anxious for a Manchu triumph, and seems to have been careful not to achieve too much. Hanyang was recaptured by the Imperialists, but Nanking fell to the Revolutionists in December, and a peace conference met in Shanghai.

A Provisional Government was set up at Nanking, and Sun Yat-sen elected first President of the new-born Chinese Republic. It was arranged that the Manchu Court should continue to reside at Peking, and that the Emperor should receive an annual allowance of four million dollars after his abdication. After a short time Sun Yat-sen resigned the Presidency in favour of Yüan Shih-k'ai, who was widely acclaimed as the ' strong man ' necessary to steer the country through dangerous waters at a very critical epoch. On the whole he governed well, though he excited not wholly undeserved obloquy by his ruthless suppression of the powers of Parliament. This policy quite alienated him from the South, and another revolution was attempted in 1913, but sternly checked, and Sun Yat-sen had to take refuge in Japan. The country as a whole, however, appears to have supported Yüan, and it was not until the beginning of 1916 that a thorough revulsion of feeling was created by his ill-judged decision to assume the imperial title. Popular indignation ran so high that all the arrangements for the ceremony of enthronement had to be cancelled at the last moment. Yüan died not long after, being succeeded in the Presidency by Li Yüan-hung.

The Chinese Dynasties

Name of Dynasty.	*Began.*	*Ended.*
The Age of the Five Rulers	B.C. 2852	B.C. 2205
Hsia	2205	1766
Shang or Yin	1766	1122
Chou	1122	255
Ch'in	255	206
Han, Former Han or Western Han	206	A.D. 25
Later Han or Eastern Han	A.D. 25	221
The Three Kingdoms [Minor Han, Wei, Wu]	221	265
Western Chin	265	317
Eastern Chin	317	420
Division between North and South [Sung (house of Liu), Ch'i, Liang, Ch'ên, Northern Wei, Western Wei, Eastern Wei, Northern Ch'i, Northern Chou]	420	589
Sui	589	618
T'ang	618	907
The Five Dynasties [Posterior Liang, T'ang, Chin, Han, and Chou]	907	960
Sung	960	1280
Yüan	1280	1368
Ming	1368	1644
Ch'ing	1644	1911
Chinese Republic	1912	—

CHAPTER VI

PEOPLE

Population—Races—The Chinese—Native Races—The Manchus—Social Organization—Religion—Primitive Religions—Taoism and Confucianism—Buddhism—Ancestor Worship—Other Religions—Christian Missionary work in China.

Number and Density of Population

No accurate census has ever been taken of the population of China, and the more or less careful estimates made from time to time show wide discrepancies. Thus, if we take the Customs Estimate of 1910 and the Census of the Ministry of the Interior made in the same year, we find that the former gives a total of 421,425,000, and the latter 316,271,000.

The census of the Ministry of the Interior (Min-chêng Pu) for 1910 is regarded by competent judges [1] as the most reliable estimate as yet furnished. It is based on a census of families, and the number of persons in a family is computed on a system of averages. The averages have been calculated by the results of a census of heads which has been completed for certain parts of China. It should be added that children below six years of age are not included in the 1910 census, and Mr. Rockhill calculates that their inclusion would bring the total up to 325,000,000 in round numbers.

The distribution of this vast population over the 1,500,000 square miles of China Proper is irregular, varying widely with the geographical position and physical features of the different provinces. Thus the populations of Kansu, Yunnan, and Kuangsi are respectively 40, 58, and 84 persons per square mile, while that of Shantung is 528. The six maritime provinces of Chihli, Shantung, Kiangsu, Chekiang, Fukien, and

[1] See W. W. Rockhill, *T'oung Pao*, vol. xiii, and *The China Year-book*, 1914.

Table of Population, etc.

(Figures taken from *The China Year-book*, 1916)

Province.	*Area, sq. miles.*	*Census*, 1885.	*Minchengpu Census*, 1910.	*Customs Estimate*, 1910.	*Pop. per sq. mile.*	*Capital of Province.*
Anhwei	54,826	20,600,000	17,300,000	36,000,000	315	Anking
Chekiang	36,680	11,700,000	17,000,000	11,800,000	463	Hangchow
Chihli	115,830	17,900,000	32,571,000	29,400,000	281	Paotingfu
Fukien	46,332	23,500,000	13,100,000	20,000,000	282	Foochow
Honan	67,954	22,100,000	25,600,000	†	376	Kaifeng
Hunan	83,398	21,000,000	23,600,000	22,000,000	282	Changsha
Hupeh	71,428	33,600,000	24,900,000	34,000,000	348	Wuchang
Kansu	125,483	5,400,000	5,000,000	†	40	Lanchowfu
Kiangsi	69,498	24,500,000	14,500,000	24,534,000	208	Nanchang
Kiangsu	38,610	21,300,000	17,300,000	23,980,000	448	Soochow
Kwangsi	77,220	5,100,000	6,500,000	8,000,000	84	Kweilin
Kwangtung	100,000	29,700,000	27,700,000	32,000,000	277	Canton
Kweichow	67,182	7,700,000	11,300,000	†	168	Kweiyang
Shansi	81,853	10,800,000	10,000,000	†	122	Taiyüanfu
Shantung	55,984	36,500,000	29,600,000	38,000,000	528	Tsinan
Shensi	75,290	3,300,000	8,800,000	†	116	Sianfu
Szechwan	218,533	71,000,000	23,000,000	78,711,000	105	Chengtu
Yunnan	146,714	11,700,000	8,500,000	8,000,000	58	Yünnanfu
Shengking	363,700	—	14,917,000	17,000,000	41	Moukden
Kirin						Kirin
Heilungkiang						Aigun
Totals	1,896,515	377,400,000	331,188,000	438,425,000	174	
Sinkiang	—	(without	2,491,000			
Manchu Military Organization	—	Manchuria)	1,700,000			
Dependencies	—		760,000			
Tibet (Chinese Estimate)	—		6,500,000			
			342,639,000			

† Combined population of these five provinces estimated at 55,000,000.

Kuangtung contribute about three-sevenths of the total, with a combined average of 388 persons per square mile. If we take the density of population of the United Kingdom as 372 per square mile, and that of Germany as 312, we can form some idea of the man-power of these provinces.

The table on p. 95 sets out the areas of the provinces and dependencies of the Chinese Republic, and the latest information regarding the population.

Races

The Chinese

The origin of the Chinese race, which is generally regarded as belonging to the Mongolian family, is still a matter of dispute, some authorities holding that the parent stock came in from the countries which lie north-west of China, others that it was indigenous to Eastern China. One thing, however, is certain, that the Chinese type was formed by the mingling of many races with the original stock,—Tatars, Tibetans, Burmese, Shans, Manchu, and even Arabs and Japanese. The result is a race which is short in stature, seldom exceeding 5 ft. 4 in. in height except in the northern provinces : brachicephalous (i. e. round-headed), with round face, low forehead, high cheek-bones, black almond-shaped eyes which slant upwards and outwards, short flat nose, large mouth, small chin which tends to recede, lank black hair, and yellow skin. These physical characteristics are accompanied by a mental disposition which is on the whole reserved, earnest, and good-natured.

Native Races

In certain parts of China, particularly in the south and west, there is a considerable sprinkling of aboriginal tribes which still maintain their national characteristics. Indeed, it was not till the nineteenth century that their subjugation was seriously taken in hand. The most independent of these are the Lolos of Kweichow and Yunnan, and the kindred Mantze or Lolos of Szechwan.

The Lolos are an Indo-European race, who claim to have come from the region between Tibet and Burma. In contrast with the Chinese they have white skin, hooked nose, brown hair, and grey or blue eyes which are not almond-shaped. They are warriors and hunters, sometimes pastoral, but rarely agricultural. They have their own language, and are nature-worshippers.

The Miaotzŭ are a nomad and pastoral tribe still found in Yunnan. They claim to have come from the East. In appearance they are shorter and darker than the Chinese, with rounder faces and sharper features.

The Ikias of Kweichow and Kwangsi closely resemble the Miaotzŭ.

The Hakkas are found chiefly in Kwangtung and Kwangsi, but also in Fukien, Kiangsi, Chehkiang, Formosa, and Hainan. They speak a Chinese dialect, and live in small and scattered groups, except in the prefecture of Chiaying in NE. of Kwangtung, where they have a large settlement.

The Hoklos are found principally in the NE. of Kwangtung, whither they migrated from Fukien. They speak a dialect akin to that which prevails in Fukien, and are a rougher, wilder race than the southern Cantonese. A number of them are employed as chair-bearers at Hongkong.

Other native races of less importance are the Yao of SW. Kwangtung and Hunan; the Sai, Si, or Li of Hainan; the Mosos or Musus of NW. Yunnan; the Lisus of Likiang Fu in Yunnan; the Minchias of Tali Fu in Yunnan; the Sifans of W. Szechwan and Kansu.

The Manchus

Finally, the Manchus, of whom there are approximately 4,000,000 resident in China, were for two hundred and seventy years the dominant race until the revolution of 1911 brought their dynasty to an end. They belong to the Tatar-Mongol tribe which overran Manchuria and thence descended upon China, conquering the country in the middle of the seventeenth century, and terminating the native Ming dynasty. The

Manchus are a more robust and energetic race than the Chinese, though intellectually inferior to them. They do not differ very widely from the latter in appearance and customs, but their eyes are horizontally set instead of oblique, and their women do not practise foot-binding. For long they kept apart as a race of soldiers, practically monopolizing the army and living on tribute ; but since the eighteenth century they have become more and more assimilated by the Chinese, and have lost much of their martial superiority.

Social Organization

The social organization of the Chinese is based on the family, the family, rather than the individual, being the unit, and the head of the family being responsible for the good conduct of its members. Ancestor-worship, which fits in naturally with such a scheme of society, is universal, and its logical consequences are the exaltation of the virtue of filial piety and the attaching of supreme importance to funeral rites. Other characteristics traceable to the same cause are the strong conservative tendencies, the exclusive attitude towards the outside world, and the self-satisfaction with regard to their own civilization, which are inherent in the Chinese race. All social intercourse is marked by elaborate ceremony, the extraordinary value attached to ceremonial rites being well illustrated by the saying that ' all virtues have their source in etiquette '.

Broadly speaking, there are four classes in Chinese society—the literary, agricultural, artisan, and trading classes. Hereditary aristocracy hardly exists, being practically confined to the Imperial family, and its place is taken by a bureaucracy of the official classes.

For many centuries official appointments were made on the results of the State examinations, for success in which the qualifications were literary capacity and a knowledge of the classics. Hence the identity of the governing classes with the *literati*. Outside this limited body the standard of education is low, and the average Chinaman can neither read nor write his own language with fluency.

The position of women is one of inferiority. Marriage is a matter of arrangement between parents, and only at the end of the elaborate marriage ceremonial does the bridegroom see the face of his bride. Polygamy is countenanced, and divorce is obtainable on numerous grounds. Early marriages are the rule, and great importance is attached to male issue, the female children being often regarded with disfavour. Women habitually rouge their faces and paint their eyebrows. Cramping of the feet is practised by all classes of women, though the modern tendency is to discourage it. With regard to clothing the general scheme is very similar for both sexes, viz. a long loose jacket or robe fitting closely at the neck with wide sleeves, and wide short trousers : over the robe shorter jackets are worn according to the weather.

The wearing of a pigtail by men was ordered by the Manchus as a sign of subjection when they conquered China in the middle of the seventeenth century. Since the establishment of the Republic in 1912 the pigtail has been abandoned by the better classes, and will no doubt gradually be discarded by the nation as a whole.

The general standard of living is low. The bulk of the Chinese belong to the peasant class, and owing to the constant division of property among succeeding generations the holdings rule very small. The staple food of the people is rice. Two meals a day are considered sufficient. Beef is not eaten; mutton is eaten chiefly by the Mohammedans : but there is no limit to the use of other articles of food, except the means to acquire them. The tables of the rich are supplied with a great variety of food, much of which is strange to the European, and Chinese cookery is held in high esteem. Native wines are good. The popular drinks are a kind of beer made from rice and *sam-shu*, a spirit, distilled from the same grain. But the Chinese as a whole are an exceedingly temperate race.

The Chinese are industrious and clever workmen, gifted with great manual dexterity. Labour is cheap and in unlimited supply, and all work that can be done by hand is done in that

manner, machinery being used as little as possible. In this way the difficulty of finding employment for the masses is overcome.

In business the Chinaman is adroit, but eminently reasonable, and appreciates the value of commercial honesty.

In agriculture he obtains wonderful results with primitive implements, and he is an adept at gardening.

Religion

In the matter of religion the Chinese as a whole are vague, tolerant, even promiscuous. Provided its teaching does not clash with the law of the land, or involve any political interference, any religion is allowed a hearing. Taoism and Buddhism, the two most popular religious systems in China, though antagonistic in the past, have lived so long side by side in perfect mutual tolerance, and have borrowed so much the one from the other, that they now exist without rivalry and almost without distinction.

Primitive Religions

The earliest religion of primitive China appears to have been monotheistic, recognizing one supreme power, vaguely defined as *t'ien* (heaven), or endowed with more personal attributes under the name of Shang Ti (the lord of heaven). The transition from this to the worship of the heavenly bodies led eventually to pure nature-worship, in which the sun, moon, stars, earth, sea, rivers, &c., were peopled with spirits who dispensed the heat and cold, wind and rain, and all the blessings and afflictions due to natural causes. This nature-worship, though no longer recognized, still tinges the religious observances of the modern Chinese, and it has been in part perpetuated in the State worship of heaven and earth, which was the prerogative of the Emperor.

Side by side with all the other beliefs, and in the main overshadowing them, ancestor-worship has been in general practice in China from time immemorial. It is, in fact, the corner-stone of the Chinese social fabric. We shall return to this subject later.

Taoism and Confucianism

The same century which witnessed the life and teaching of Buddha in India was memorable in China for the founding of two great systems by the two sages Confucius and Lao-tzŭ, one a philosophy and the other a religion. Confucius, who was born in 551 B. C., built up a code of ethics which still serves the educated classes of China in place of a religion. Though its teaching is secular it recognizes ancestor-worship ; and it admits the existence of supernatural powers, though advising men to confine their attention to things which more nearly concern them. Confucianism is a practical philosophy, setting a high moral standard. Its key-note is our duty towards our neighbour,—do unto others as you would they should do unto you.

The Taoist religion claims as its founder the semi-legendary Lao-tzŭ, who is reputed to have been born about fifty years before Confucius. His doctrine of *Tao* (the way, the right line of conduct) was negative and obscure. Virtue was to be acquired by withdrawing from the contamination of worldly things, by subduing the passions and purifying the soul. In the hands of his disciples the philosophy of Lao-tzŭ became a religion inculcating the worship of a supreme First Cause, the source of human life, and urging man to purge away all mortal grossness, and so obtain immortality and oneness with the supreme. Veneration for old age, one of the results of ancestor-worship, was already deeply seated in the Chinese mind. Under the Taoists this developed into the worship of longevity. The natural consequence was a search for the elixir of life, leading to the practice of alchemy, magic, and all manner of charlatanry. A host of picturesque fables arose from this quest of the secret of immortality, resulting in the deification of fortunate beings who were reputed to have found the elixir of life, of hermits and sages who lived in mountain solitudes, and the discovery of fairies (*hsien*) and spirits innumerable. At the present day the Taoist priests are little else than sorcerers and magicians, dealers in amulets and spells, who live on the ignorance and superstition of the people.

Although they strenuously opposed the early progress of Buddhism, the Taoists did not hesitate to borrow freely from the Buddhist ritual or to copy their temples, vestments, and priestcraft, when they realized that such things were the necessary paraphernalia of a popular religion. In more recent times Buddhism and Taoism have lived amicably side by side, and their temples are impartially attended by the mass of the Chinese people, who make little or no distinction between the two.

Buddhism

Buddhism was first officially recognized in China by the Han Emperor Ming Ti. He sent a mission to India in A.D. 65, which returned two years later bringing Buddhist priests, writings, and images for the enlightenment of China. A temple was built at Lo-yang, from which the doctrines of the new faith were disseminated. Buddhism was alternately patronized and proscribed by the Court in its early days, and met with bitter opposition from the Taoists ; but from the eleventh century onwards it enjoyed comparative immunity, and the three figures representing Confucius, Buddha, and Lao-tzŭ are frequently depicted in friendly intercourse.

The transcendental side of Buddhism appears to have been little cultivated in China. Indeed it was the Mahayana, the inferior sect, which took root there, and whose doctrines of rewards and punishments, and of further existence beyond the present, obtained a firm hold on the popular mind. These teachings satisfied a spiritual craving for which neither Confucianism nor Taoism had anything to offer. Moreover, the rites which the Buddhists perform in honour of the dead made a special appeal to a nation of ancestor-worshippers. Though in the main degenerate, Buddhism is still universally recognized in China, and the Buddhist temples are thronged by superstitious worshippers anxious to obtain some material benefit or ward off some disaster. Its prayers and invocations retain their Sanskrit forms, and the foreign ritual is followed mechanically and ignorantly by both priests and people.

Buddhism in China has been said 'to be decried by the learned, laughed at by the profligate, yet followed by all'.

Its attitude towards other creeds has been one of the largest tolerance, and it could even find a place in its pantheon for the deities of other religions. The free interchange of ideas between Buddhism and Taoism has already been remarked, and a Chinaman may worship without prejudice at both temples and be at the same time a good follower of Confucius.

Ancestor-Worship and the Cult of the Family

The real religion in China is the cult of the family. 'The doctrines of Confucius and the ceremonial of the State religion, exhibit the speculative, intellectual dogmas of the educated *literati* and thinkers, who have early been taught the high ideal of the Princely Man set forth by their sages. The tenets of Lao-tzŭ and the sorcery and incantations of his followers show the mystic and marvellous part of the popular belief. Buddhism takes hold of the common life of man, offers relief in times of distress, escape from a future hell at a cheap rate, and employment in a round of prayers, study, or work, ending in the nirvana. But the heart of the nation reposes more upon the rites offered at the family shrine to the two "living divinities" who preside in the hall of ancestors than to all the rest.'[1]

Each generation of ancestors is represented by a tablet engraved with the names of father and mother, set up in surroundings which vary in state with the means of the individual. The tablet is worshipped regularly by parents and children together in the privacy of their homes. In April the people flock publicly to the family graves to tend them and to worship. The sincerity of this cult of ancestors is reflected in the national virtues of the Chinese, their cultivation of filial piety, veneration for parents, and in the strengthening of family ties.

In return for the care of their graves and the worship at their shrines the ancestral spirits watch over the material

[1] S. Wells Williams, *The Middle Kingdom*, vol. ii, p. 236.

prosperity of the living, and propitiate the invisible powers which surround them. Hence the scrupulous care that dead relatives should be interred under the most favourable conditions. These conditions, which include the orientation, altitude, outlook, &c., of the grave, are determined by experts in geomancy, who are supposed to understand the direction of the earth currents and all the occult influences grouped under the general head of *fêng-shui* (wind and water); and it is unnecessary to add that the professors of geomancy well know how to exploit the superstitions of their clients. Incidentally, this belief in *fêng-shui* has created very great difficulties in connexion with the erection of high buildings and the construction of railways by Europeans, anything which might be thought to interfere with the mysterious earth and air currents of the graves being obstinately opposed.

It follows, as a matter of course, that funeral rites in China are of an elaborate and costly character, and performed with the utmost ceremony. The requirements of the dead in the spirit world are similar to those of the living. They were met in ancient times by placing in the grave pottery or wooden models of houses, furniture, utensils, cattle, slaves, &c. To-day a less wasteful practice prevails, of burning paper representations of all the necessary paraphernalia at the grave, and so transmitting them to the spirit world. After the coffin has been interred with all due solemnity the tablet inscribed with the dead man's name is brought back to the house and enshrined on the domestic altar. The period of mourning is long, and is even supposed to extend to three years at the death of the head of the family. The mourning colour is white.

Other Religions

Of the other religions which have obtained a footing in China Mohammedanism has the largest following. The adherents of Islam reached China as early as A. D. 628, and continued to arrive by the caravan routes in the north and south-west and the sea routes in the south-east. Their religion was benevolently received and allowed to spread unchecked. The

first mosque was erected in Canton by the colony of Arab traders in that city. It is said that there are now as many as 30,000,000 Mohammedans in China. The number of Christians is placed at about one million and a half, of whom four-fifths belong to the Roman Catholic Church.

Apart from the recognized religions there are numerous deities and saints worshipped by the various trades and professions. The literary class venerates certain gods of literature, and adorns its houses and its persons with emblems of literary success. Soldiers, sailors, physicians, barbers, mummers, &c., all have their patron gods, whose images they worship. Finally, the mass of the people are a prey to all manner of superstitions. They live surrounded by spirits benignant and malignant, which must be approached and appeased by various means,—by the mediation of their ancestors, by prayers and offerings in the temples, by innumerable amulets and charms worn on the person or hung in their houses. It is to meet these supernatural influences, and especially such as cause sickness and material loss, that they invoke the aid of the priests rather than for purposes of devotion. Hence the prevalence of all manner of charlatanry both in and out of the temples.

For the rest the priests move in the background, and interfere but little with the personal affairs of the people. They have practically no political power, and the evils of a political priestcraft are scarcely known in China. Throughout their history the Chinese have suffered less than any nation from outbursts of religious fanaticism, and the occasional outbreaks against foreign religions have almost always been due to attempts on the part of the foreigner to extend his influence to civil affairs.

Christian Missionary Work in China

Apart from the successes won by the Christian missions in their primary object, the conversion of the Chinese, we owe the greater part of our knowledge of the language, literature, history, manners, and customs of the Chinese to the mission-

aries who, by their devotional books and by treatises in almost every department of secular history and science, have served as interpreters between the Far East and the West.

Before the nineteenth century missionary activity in China was confined to the Nestorians and the Roman Catholic societies. The most successful of the latter have been the Jesuits, of whom Matteo Ricci won his way to high esteem in the Emperor's court, while two of his successors, Schall and Verbiest, were appointed president of the Board of Astronomy and Mathematics at Peking.

Since the nineteenth century the Protestant missions have worked, as their statistics show, with increasing energy and success; and incidentally they have added vastly to our information about things Chinese. Not a few of their members have been reckoned scholars even by the Chinese *literati*; and it is only necessary to mention the dictionaries and other works of Morrison, Medhurst, Doolittle, and Wells Williams, the brilliant translations of the Chinese Classics by James Legge, and the writings of Eitel, Faber, Edkins, Chalmers, and Arthur Smith to realize our debt to them.

The Chinese distinguish the teaching of the Roman Catholic from that of the Protestant Churches; *t'ien-chu-chiao* (doctrine of the Lord of Heaven) being their name for the former and *yeh-su-chiao* (doctrine of Jesus) for the latter.

Though it is probable that the Chinese made their first acquaintance with Christianity early in the Christian era, the first recorded attempt to found a Church in China was that of the Nestorians, a sect which established itself in Syria and Persia and penetrated the Chinese Empire early in the sixth century. Moreover the famous Nestorian tablet which was unearthed at Sianfu in 1625 describes the coming of the priest Alopen to China in 635, and further shows that the Nestorians established churches and monasteries there and that they enjoyed the intermittent favour of the Chinese emperors. The tablet itself was erected in 781, and was probably buried in 845, when an Imperial decree was issued suppressing the Nestorians. They lingered on, however, in

parts of China, and seem to have been flourishing in the fourteenth century, though all trace of them had disappeared at the end of the sixteenth century.

Meanwhile the first Roman Catholic missionaries had reached China in the thirteenth century, and the Franciscan, John of Montecorvino, was appointed Archbishop of China in 1307. He had arrived at Cambaluc (Peking) in that year, but the closing of the overland route at the end of the century and the establishment of the native Ming dynasty put an end to the first phase of Roman Catholic activity in China.

The second phase began late in the sixteenth century after the sea route had been secured by the Portuguese, and was marked by the activity of the Jesuits, who did not hesitate to modify their teachings to meet Chinese prejudices. St. Francis Xavier initiated the movement, but he failed to enter China, and died on an island off Kwangtung in 1552. Valignani, however, settled at Macao in 1560, and one of his emissaries, the celebrated Matteo Ricci, succeeded in entering Shaohingfu in 1582, whence he made his way to Nanchang, Soochow, Nanking, and eventually to Peking, which he reached about 1600. There he found favour with the Emperor by means of his astronomical and scientific knowledge, and was honoured with a residence in the Inner City. After his death in 1610 the Jesuits fell into temporary disfavour, but in 1622 Adam Schall regained the imperial esteem and was eventually appointed President of the Board of Astronomy and Mathematics. The same honour was afterwards enjoyed by Verbiest, who came to China in 1659. The great Manchu Emperor, K'ang Hsi, continued to treat the Jesuits with favour; but under his successors, Yung Chêng and Ch'ien Lung, Christianity was banned and its followers persecuted. Moreover the Order of the Jesuits was suppressed in Europe in 1773, and only after its re-establishment in 1822 did the Catholic missions in China begin again to make headway.

The Vincentians or Lazarists and the Franciscans carried on the work on the suppression of the Jesuits, and at the present day there are numerous societies, French, Italian,

Belgian, Spanish, and German, working for the Roman Catholic Church in China. They have partitioned the empire into five regions, in which they have established 50 bishoprics. They have 2,169 priests, two-thirds of whom are European; about 6,000 churches and chapels, and over a million converts.

The most important Roman Catholic centre is at Sikawei, which lies five miles SW. of Shanghai. The church there is said to have been founded at the end of the sixteenth century by Hsü Kuang-ch'i, a Hanlin scholar and a native of Shanghai. In fact the place is named after him, being Hsü-chia-wei (the home of Hsü family). It is now the head-quarters of the Shanghai Catholic Mission. It has a university, college, and industrial school, and maintains more than fifty schools in and around Shanghai. It is also celebrated for its Observatory, the meteorological section of which is specially important.

Meanwhile Protestant missionaries had entered the field in the nineteenth century. The first was Robert Morrison, who arrived at Canton in 1807, and was followed by the Americans, Bridgeman and Wells Williams, in 1830 and 1833. The Netherlands Missionary Society was represented by Karl F. Gutzlaff, who worked up the coast from 1831 to 1835 as far as Tientsin. The American, Dr. Peter Parker, landed at Canton in 1834 and opened the first medical mission. The success of the medical missions has been very great, and the statistics given in the *China Mission Year-book*, 1914, show that the Protestant societies supported 264 hospitals and 215 dispensaries which dealt with about $2\frac{1}{4}$ millions of patients between them.

The Opium War in 1839 seriously interfered with missionary progress; but the Treaty of Nanking in 1842 and the opening of the Treaty Ports were signals for a great revival, and numerous new societies were formed. Religious freedom has been guaranteed by a succession of treaties with various European countries from this time onward.

The China War of 1856–60 and the T'ai-p'ing Rebellion which lasted from 1850 to 1864 caused inevitable set-backs;

but after 1860 the Protestant missionaries began to penetrate the interior of China. The China Inland Mission led the way in this endeavour, though little success was achieved until the Chefoo Convention in 1876.

Numerous new societies, both British and foreign, came into existence at the end of the nineteenth century and the beginning of the twentieth ; and the total of those now engaged in Chinese missionary work exceeds one hundred. There have, however, been periods of serious difficulty, as in 1890, during the Chino-Japanese War 1894–5, and more particularly during the Boxer outbreak in 1900. But since the Russo-Japanese War 1904–5 the exclusiveness of the Chinese has given place to a thirst for Western knowledge, and to-day the Chinese Republic is disposed to guarantee full religious liberty to all in China.

Statistics of the Protestant Missions in China in 1912–13, published in the *China Mission Year-book*, 1914, give the following figures : the returns represent over a hundred societies which supply 5,186 foreign workers. The congregations number 3,419 with a total of 356,209 members. There are 2,125 Sunday schools. There are 4,138 elementary schools with 96,371 pupils ; 436 higher elementary schools with 22,279 pupils ; 176 middle schools with 10,386 pupils ; 38 colleges and universities with 3,689 students ; 40 normal training schools with 958 students ; 143 theological schools with 3,524 students ; and 50 industrial institutes with 1,379 pupils.

CHAPTER VII

LANGUAGE AND DIALECTS

Difficulty of Chinese — Dialects — Chinese a monosyllabic language — The written language—Characters—Syllabary and tones—Advice to learners of the spoken language.

THE following passage occurs in a contribution to the *Chinese and Japanese Repository* for 1863, and has been recently quoted in the innumerable discussions that have been going on and are still going on touching the urgent need for British merchants to bestir themselves : ' The reason why so few foreigners trouble themselves to learn Chinese is the false conception which has been prevalent concerning the difficulties to be contended against. The acquisition of the living tongue of China can be made more readily and perfectly under a European than by means of the unscientific teaching of a native.' This pronouncement of half a century ago has had little practical effect in modifying the situation, despite the successful efforts of Sir Thomas (then Mr.) Wade in 1867 to organize a thoroughly efficient means for learning the dialect of Peking. Sir Thomas Wade's work is deservedly imperishable, and nothing more influential has superseded it.

From a general point of view no language can be postulated more difficult than another, for every language is the easiest expression by the native speaker thereof of his sentiments ; specifically, Chinese is provably as easy to speak as English, for any English child born in China, and allowed to grow up amongst native servants and friends, speaks the local dialect with absolute perfection along with English. The difficulty of a language cannot therefore be inherent, but must lie in the difference between the language already spoken and that which is to be learnt ; it is only the difference between braying and neighing in another degree, the aims being identical. Chinese,

accordingly, is so different from English, that it becomes increasingly difficult in the ratio of the learner's established custom: hence—given equal natural intelligence—a youth of 18 invariably progresses more rapidly than an adult of 40.

No doubt Chinese is, by reason of its seemingly grotesque differences, *apparently* very hard to learn at all; and, by reason of its innumerable and confusing dialects, *really* very hard to learn correctly, unless it is studied in a place where everybody speaks in the same way. For in China the spoken language is not the same in any two places; and in Peking, where officials congregate from all parts, no one but a born native speaks quite correctly. It is scarcely an exaggeration to say that amongst a group of native officials forming a government committee of any mixed kind, no one can be guaranteed clear in his expositions unless he 'yells at' you, or you at him, occasionally; or unless he indulges in *pi-t'an* (=pencil chat), i.e. jotting down, or merely indicating by flourishes of his forefinger, the written character intended to express the particular sound he is repeating for the special benefit of his colleague's provincial ear.

The learner who wishes to follow the illustrious example of Sir Thomas Wade and really break the back of this obstinate language must choose his dialect and stick to it. The reason is that, as will shortly be shown, all dialects are regular. That is to say, no matter how unlike they may be, the changes in pronunciation follow definite fixed rules: hence instinct teaches every native to make mental allowances for speakers of other dialects, and it is obvious that these mental allowances are more easily made when the speaker is 'in order' than when he speaks imperfectly.

Dialects

On the other hand, though the Chinese dialects all clearly belong to one common stock, yet they differ from one another quite as widely as the various Romance languages in Southern Europe—say, French, Italian, and Spanish. Taking a linguis-

tic survey of China, we find most of these dialects fringing the coast-line, and penetrating but a comparatively short way into the interior. Starting from the province of Kwang-tung in the south, where the Cantonese, and farther inland the Hakka, dialects are spoken, and proceeding northwards, we pass in succession the following dialects : Swatow, Amoy—these two may almost be regarded as one—Foochow, Wen-chow, and Ningpo. Farther north we come into the range of the great dialect popularly known as Mandarin (*Kuan hua*, or official language), which sweeps round behind the narrow strip of coast occupied by the various dialects above-mentioned, and dominates a hinterland constituting nearly four-fifths of China Proper. Mandarin, of which the dialect of Peking (the capital since 1421) is now the standard form, comprises a considerable number of sub-dialects, some of them so closely allied that the speakers of one are wholly intelligible to the speakers of another, while others (e.g. the vernaculars of Yangchow, Hankow or Mid-China, and Szech-wan) may almost be considered as separate dialects. Among all these Cantonese is supposed to approximate most nearly to the primitive language of antiquity, whereas Pekingese perhaps has receded farthest from it. But although, philologically and historically speaking, Cantonese and certain other dialects may be of greater interest, for all practical purposes Mandarin, in the widest sense of the term, is by far the most important. Not only can it claim to be the native speech of the majority of Chinamen, but it is the recognized vehicle of oral communication between all Chinese officials, even in cases where they come from the same part of the country and speak the same *patois*.

Chinese a monosyllabic language

Another point. All the Chinese dialects, and all the 'tonic' languages akin to Chinese (Annamese, Miao, Yao, Lolo, Shan, &c.) are monosyllabic, i.e. no matter what single word, whether noun, verb, adjective, conjunction, or what not,

is enunciated in one syllable, the only apparent qualification of this statement being that the vowel of many such syllables is often a diphthong; thus *chiang* and *chang*, *chiu* and *chu*, though monosyllables, contain vowels of different degrees of purity or simplicity; like the word 'gardener', by a few old-fashioned people still pronounced 'gyardner', or like the faint difference between the vowels in *chew* and *choose* made by some clear speakers.

But, after all, this monosyllabic feature of the Chinese languages must not be overweighted. All languages, even the most sesquipedalian, are monosyllabic, in the sense that all polysyllables must consist of single syllables; and all inflections, agglutinative particles, and so on, are either pure unmodified monosyllables with a definite meaning, or impure monosyllables the original meaning of which it is difficult to trace back. *Independence* and *Unabhängigkeit* are both exactly the same word: if, like the Chinese, we had always kept our European syllables separate and uncorrupted, we should have been equally comprehensible if we had said, 'Not from hang like way', or, as we still say, 'not hang on to others.' The important difference is that the Chinese in all their parts of speech, whether primary or auxiliary in meaning, have only had their own single language to deal with, whereas in English we have borrowed from so many sources that most of us are ignorant of what our own monosyllables mean. German occupies a midway position between English and Chinese: it may be said aphoristically, 'Every Chinaman knows analytically exactly what he is saying; every German knows pretty well what he is saying; few Englishmen have any exact analytical idea of what they say.' What with Greek, Latin, French, and other borrowings, English has frequently lost all trace of its component parts. Every one talks of 'insufficient circumstances', and knows generally what this means, but how many people can split these words up and define *why* each syllable has or contributes to the total effect? This instinctive feeling every Chinese has, no matter what dialect he speaks.

The written language

Coming now to the written language of China, it may be said to be, in a very true sense, the simplest script belonging to any civilized nation at the present day. The reason is that it is more directly derived from pictures than any other system of writing now in use. A certain number of characters are, indeed, or were in their original form, actual pictures of natural objects. Such are 日 sun, 月 moon, 人 man, 女 woman, 子 child, 手 hand, 口 mouth, 目 eye, 木 tree, 馬 horse, 鳥 bird, 魚 fish, &c. It is obvious, however, that abstract ideas cannot well be represented by pictures, and consequently new methods had to be devised in order to cope with the difficulty. A simple device was the joining together of two picture-characters in order to suggest a new idea by their association. Thus, 'sun' by the side of 'moon' (明) stands for the idea of brightness. A woman with a child 好 means 'love' or 'good'. A hand shading the eyes (看) is 'to look at'. A woman under a roof (安) suggests 'peace'. These and similar characters—they are comparatively few in number—are the only ones really entitled to be called *ideographs*, a word which is often inaccurately applied to Chinese characters in general. But this device was soon felt to be too cumbrous: something more practical was required, something which, while less burdensome to the memory, would keep the written language more in touch with the spoken tongue. A fairly satisfactory solution of the difficulty was found in the adoption of a phonetic principle; that is to say, compound characters were formed, of which a certain portion indicated the *sound*, while the other portion gave a clue to the *sense*.

Even so, the wide gap between spoken and written Chinese remains one of the most remarkable features of the language. Whereas the original picture script of the West gradually became modified into the letters of an alphabet, in China the

phonetic change was much less thorough, and there are no letters into which syllables may be broken up. Thus, our word *king* is written down by means of four letters, each of which has a fixed value in the syllable as a whole. But the character 王, which serves to represent the sound *wang* in its meaning of 'king', is an indivisible unit, and there is no inherent reason why it should not be pronounced *king* or in any other way. Chinese characters may be compared in this respect with our numerals 1, 2, 3, &c., which are used in the same sense by all European nations though pronounced in different ways. The above shows how it is that Chinese writing can not only be the same for a number of very dissimilar dialects, but even do duty for Japanese, a totally different type of language.

Since characters cannot be 'spelt', it is evident that the effort of memory involved in reading Chinese aloud must be greater than in the case of an alphabetical language. The object of the phonetic element is to relieve this strain on the memory to some extent. Thus, analysing the compound character 旺 'brilliant', we have on the left the modified form of the pictorial symbol for 'sun', which gives a clue to the meaning. On the right appears the character which, as we have seen, means 'king'; but here its sole function is to indicate the sound of the whole word, which is *wang*. This is a simple example, but in many cases both sound and sense are indicated much more vaguely. The character 狂, for instance, is pronounced *k'uang*, and means 'mad'. On the right we again find 王 as phonetic, but this time *wang* only rhymes with *k'uang*; and on the left is a corruption of the picture of a dog, which is supposed to convey the notion of wildness.

An official statement by the Board of Education asserted quite recently that less than one per cent. of the whole Chinese race (seven per mille) were acquainted with literature. As a matter of fact, a much larger proportion of male Chinese have for many centuries had a slight acquaintance with the

written character sufficient to carry them through their daily business, women in most parts being entirely ignorant; but this slender knowledge was before the introduction of newspapers and advertising a generation ago. Now both sexes are rapidly advancing, and the dullest minds are stimulated by curiosity as to what is going on in the world. But all Chinese, illiterate or learned, have as much grammar as we have; that is to say, they arrange the order of their words by hereditary instinct, and daily practice in such a way that they extract the same effective results as though they had all our moods, tenses, declensions, and cases. The main difference between vulgar speech and literary elegance is that the latter aims at eschewing tautology, repetitions, expletives, and coarseness; the style tends to the telegraphic in its economy. The most learned Chinese *literatus* cannot in the least explain how he arrives at 'style', yet the official, historical, narrative, and other styles are all recognized and mentally fixed, subject of course to the qualification that real masters of style attract special attention, as with ourselves. Official dispatch writers are a class apart and form a sort of semi-secret guild.

The fact that Chinese written characters are final and unchangeable cannot possibly have anything to do with the fact that the spoken language is (as above qualified) monosyllabic and uninflected, for men spoke and formed their language for the current purposes of life long before they ever thought of even elementary writing. Moreover, even within historical memory, Chinese writing was so laborious and clumsy an art, writing materials were so expensive and unwieldy, that only an infinitesimal number of scholars in a very few capital cities could have had the independent means to study. In the same way it must be remembered that men spoke long before the idea of 'grammar' was conceived in other lands. The peculiarity of Chinese is that the people, literate or illiterate, have continued to speak as they have always spoken, without the faintest idea of 'good grammar' or 'bad grammar' having entered a single mind, and this over a history of 4,000 years. A school-

master may chide a boy for rude expressions, but he never dreams of correcting his 'grammar'; nor are there any books on grammar. Language grew through untold generations of gradual development before grammar was invented to harness it to the restraint of fancy rules. Even in Europe dialects still run wild, and correct speech is only ancillary to local brogues, whereas in China no one has ever dreamt of regulating mere speech, however minutely rules for poetry and essay-writing may have developed. Every Chinese official speaks or tries to speak mandarin of some kind; not necessarily Pekingese (the fashionable language for the last thousand years), but some form of that vast series of correlated dialects current over the whole of China, Manchuria, and (if Chinese be spoken at all) Mongolia, Korea, and Tibet, which pass by that unsatisfactory name. But no Cantonese or coast-Chinese of any kind holding an official position under the Manchu dynasty would ever speak his native non-mandarin brogue officially in public. Interpreters were always used in courts of law, and it was no uncommon sight to witness, say, a Cantonese judge, who himself spoke imperfect mandarin, having the evidence of a Cantonese prisoner (which he understood perfectly) interpreted to him in another form of mandarin equally imperfect.

Characters

It may strike Europeans as singular that the total number of syllables for 40,000 written characters ranges between 350 to 800. But this statement is subject to qualifications which reduce it to comparative impotence. In the first place 12,000 characters easily embrace the whole gamut of reasonable literature, and probably of the three or four million men in China officially dubbed 'literate', not one million can be depended on to pronounce clearly upon more than 8,000 or 9,000. Three-fourths of the characters are waste; duplicates or 'cranks' of this or that kind. A good average knowledge, sufficient for supervising correspondence, reading proclamations, glancing over the newspapers and official gazettes,

dealing with commercial documents, &c., would be 4,000 or 5,000. Hence it follows that no character beyond this last number can possibly have a local pronunciation that can be depended upon; that is to say, if a person, Chinese or other, does not know it from personal experience, he must accept the native dictionary pronunciation, and this itself is imperfect, because the native dictionaries, in arranging their initials and finals, have only been able (1) to go back to ancient *dicta*, or (2) to accept the personal pronouncements of individuals (who may be provincials) in court circles. To put it in another way, the ordinary business Chinese of standing only makes use during life of 4,000 or 5,000 words in the whole of his conversation and business, and can only fit that conversation with the same number of signs. Hence the European student need not burden his memory with more (unless he wish to be a specialist), and if he stumbles across either strange words or strange characters he must look them up; after which he is as good an authority as the average Chinese, who must do the same thing.

Syllabary and tones

As to the number of syllables in a monosyllabic language not exceeding 350—indeed the Hankow dialect has only 320—it is doubtful if even in polysyllabic English our separate monosyllables would reach 1,000. The whole Japanese language from first to last, including Chinese importations, is expressed by 50 separate monosyllables; but then the language is highly polysyllabic, and there are many clippings, prolongations, and 'thickenings' to help it out. In China the same helping out effect is partly gained by tones, which practically double, treble, or even quadruple the distinctions: yet, with all that, one of the real difficulties of Chinese—especially the 'mandarin' dialects—to foreign students, even those with a good ear for tones, is the want of variety in word-sounds, which difficulty is of course accentuated in the case of persons—and they are many—who cannot acquire the tones at all. The reason why some dialects have only

400 whilst others have 800 sounds is that either initials or finals, or both, have been merged in the cases of the mandarin group, whilst they have been preserved in the ignored dialects of the coast. It is easily provable, from close examination of the present form of Korean, Japanese, and Annamese words taken over from Chinese (from A. D. 1 till, say, A. D. 1300), that the Cantonese dialect, which is far the highest in development, corresponds most closely with the theoretical or dictionary form of ancient times, still rigidly adhered to for poetical purposes, though no Chinaman can explain why. This is the more remarkable in that the Cantonese are not of pure 'Old China' stock, and the explanation probably is that as the Tartars gradually possessed themselves of North China (as explained in the chapter on history), the pure Chinese colonized the south in huge numbers by way of the lakes, and took their speech with them.

On the other hand, the now existing mandarin dialects of Old China, West China, and the foreign provinces above enumerated, evidently represent corrupt forms as debased by successive inroads by Tartar rulers, who (like the Koreans and Japanese with adopted Chinese words) would naturally make a clean sweep of tones, surds, sonants, aspirates, and other refinements strange to their own guttural and agglutinative speech. To illustrate the extent of mandarin corruption: what ought to be *ki*, *tsi*, *kik*, *kip*, *kit*, *tsik*, *tsip*, *tsit*, are all debased into one uniform 'mandarin' form *chi*; thus a Cantonese has eight chances at guessing right on one mandarin chance in this particular instance.

Advice to learners of the spoken language

It will be obvious from what has been said that the dialect of most use is mandarin. There is some difference of opinion as to the best form of mandarin to study, but if the student chooses any other than Pekingese, which is still the accredited official language, he can only do so for special reasons. There

is a better apparatus of handbooks and other aids for the foreigner learning Pekingese than in the case of any other dialect. Excluding Cantonese, which is important to British officials on account of the local needs of Hongkong, it may be said in a general way that no one except a missionary ever studies a purely local dialect. To those who wish to master Pekingese there is no better lesson-book than Sir Thomas Wade's *Tzŭ Erh Chi*, in the preface to which they will find complete instructions for their guidance. Where the aim is less ambitious, and only an acquaintance with every-day speech is desired, the learner will probably find that Sir Walter Hillier's *The Chinese Language and how to learn it* will answer all his requirements.

CHAPTER VIII

CHRONOLOGY AND THE CALENDAR

New Calendar same as European—Old Chinese Calendar—Cyclical systems —Solar terms—Time zone system.

THE Chinese calendar now conforms to the European system. This important change was effected by a resolution passed by the Tzŭ-chêng Yüan on Nov. 20, 1911 ; and on January 1, 1912, Dr. Sun Yat-sen took the oath as President of the Nanking Provisional Government in 'the first day of the first year of the Republic of China'. The new calendar is used for dating all official documents, though the old style has not yet been entirely abandoned in the provinces.

Under these circumstances it will be well to understand both the old and new systems, and the differences between them.

The civil year in Europe is reckoned as the period of revolution of the earth round the sun, and it is divided into twelve months regardless of the moon. In order to make the year correspond exactly with the course of the sun, an adjustment by means of an intercalary day has to be made at stated intervals, i.e. every four years. The calendar constructed on these principles has now been adopted by the Chinese, though without borrowing the European names for the months. The Chinese months are simply numbered, i.e. first month, second month, third month, &c. Additional names for months and periods of the year which were current under the old system will be mentioned later.

The old calendar in China was based on the revolutions of the moon round the earth, each month corresponding to one revolution. The period of a revolution being 29 days and a fraction, the year of twelve months totalled 354 or 355 days ;

and to balance this with the length of the solar years, it was necessary to intercalate a month in certain years. The result was that in 19 years there were 12 years of twelve months and 7 intercalary years of thirteen months.

The precise apportionment of the days in the calendar was worked out annually by the Board of Mathematics, submitted to the Emperor for his approval, and issued with great ceremony on the first day of the tenth month. It was then circulated round the provinces, where printed copies were issued to the public by order of the viceroy or governor.

The old system was roughly followed from the Han dynasty which began in 206 B.C. ; but about A.D. 1670 it was further regulated by John Adam Schall, a Jesuit priest, who based the calendar on the movements of the moon as observed in the meridian of Peking.

The hours of the day are reckoned by the Chinese in twelve periods of two hours each, beginning at 11 p.m. The first day of each month was that in which the new moon appeared at Peking ; and since the phases of the moon do not correspond with any multiple of 24 hours (a complete lunation occupying 29 days and a fraction), it followed that certain lunar months, when the fraction fell entirely on one day, would consist of 29 days only, whilst others, when the fraction was divided between two days, would consist of 30. For example, if the new moon appeared at 10.45 p.m. on a certain day, that day was the first of the month in spite of the fact that it had only 15 minutes of the new moon : there were 29 complete days to follow, and a 30th (which counted in the next month) containing the balance of the period of lunation. The month would therefore consist of 30 days. Months were called ' short ' or ' long ' according as they had 29 or 30 days.

Each month was distinguished as belonging to one of the twelve signs of the Zodiac. The first month was that during which the sun entered the sign corresponding to Pisces, viz. about the 19th of February. Hence the New Year fell in China somewhere between the 20th of January and the 19th of February.

As already stated the 'common' year of 12 lunar months amounted to 354 or 355 days. When the calendar had fallen so far behind the sun that the 13th new moon no longer fell while the sun was in the sign of Pisces, a 13th month was intercalated by the duplication of one of the ordinary months, and the year contained 383 or 384 days. This was called a 'full' year.

Since the period of lunation is a little shorter than the time taken by the sun to cross a sign of the Zodiac, in 'full years' there occurred one sign in which the sun was found during an entire lunar month, and this was the month in which the intercalation was made.

One system of reckoning years was from the beginning of the reign of an emperor, e. g. 1907 was the 33rd year of the Emperor Kuang Hsü. Besides this there is another system of reckoning days and years in cycles of sixty. In this system a name is given to each day and year of the cycle and no account is taken of intercalations. It is an exact system of computation and quite independent of the calendar. The sixty cyclical names are composed of combinations of the 'ten celestial stems' with the 'twelve horary characters' or 'branches'. It should be added that the twelve branches are also used to designate the twelve signs of the Zodiac, the twelve divisions of the day, and the points of the compass. E. g. the first sign *Tzŭ* (the Rat) represents Aries in the Zodiac, the period 11 p.m. to 1 a.m., and the North: the fourth sign *Mao* (the Hare) represents Cancer, 5–7 a.m., and E.: the twelfth sign *Hai* (the Boar) represents Pisces, 9–11 p.m., and NNW. $\frac{3}{4}$ W. As signs of the Zodiac these branches are also used to designate the months, the sign through which the sun passes during the month giving the latter its name.

Besides these two methods of naming the months, the numerical and Zodiacal, there were several others having reference to physical changes, seasonable flowers, &c. Thus the second month was called *hsing yüeh* (apricot month), *hua chao* (dawn of flowers), &c.; the sixth month is *ho yüeh* (lotus month), &c.; the ninth month is *chü yüeh* (chrysanthemum month), &c.

The Chinese also recognize twenty-four solar terms which divide the year into seasons beginning approximately on February the 5th. Thus, February 5–18 is *li ch'un* (spring begins); February 19 to March 4 is *yü shui* (the rains); July 23 to August 6 is *ta shu* (great heat); November 22 to December 6 *hsiao hsüeh* (early snow); January 21 to February 4 *ta han* (great cold).

With regard to the reckoning of time in China the time-zone system was adopted at Shanghai on January 1, 1903, and subsequently at other places. It has become official for all stations of the Imperial Maritime Customs lying within the coast zone, as well as for the telegraph and railway administration. In the 7th hour zone it is optional.

Counting the zones from the meridian of Greenwich, Central and Western China, which have a standard meridian of 105° E. from Greenwich, have a standard time 7 hours ahead of Greenwich time. The eastern provinces have a standard meridian of 120° and a standard time 8 hours ahead of Greenwich.

CHAPTER IX

DISEASE AND HYGIENE

MEDICINE has not been recognized in China as one of the honourable professions. The knowledge of the so-called doctors is mainly empirical, being handed down from father to son, and it may be likened to the knowledge of the herbalists and doctors of mediaeval times in Europe. Outside the Treaty Ports hygiene and sanitation, as we understand them, are practically unknown, and the overcrowding in the big cities is everywhere favourable to the spread of epidemic diseases. Even in Hongkong in 1914 two of the health districts, into which the city of Victoria is divided, contained 966 and 946 persons respectively per acre.

Official health statistics for China are not available, but some idea of the distribution of disease can be obtained from reports of the consular and customs medical officers in the Treaty Ports and from the medical missionaries scattered over the country. Dr. W. H. Jefferys and Dr. J. L. Maxwell in their *Diseases of China* divide the country into seven large districts. For present purposes three main divisions will suffice to show the distribution as associated with climatic conditions:

(1) North China. From lat. 35° northward the climate is pleasantly warm, though often hot in summer and cold and invigorating in winter. Plague is present occasionally, cholera from time to time, dysentery is endemic, and typhus and relapsing fevers are frequent. Of late an increasing number of malarial fever cases have been noted. Climatically, it is a healthy region.

(2) Central China. From lat. 28° to 35° includes the Yangtse valley. It is cold and damp in winter, warm and damp the rest of the year. The summers are very long, hot,

and enervating. Plague rarely reaches this section, except by importation. Probably the precautions of the health authorities at Shanghai have prevented plague from becoming more widespread at that port. Cholera sweeps over this region, when it is about; there is much dysentery here; and the types of malaria are abundantly represented. Beriberi is fairly prevalent, and there are many cases of fluke-worm diseases. Rheumatism is very common.

(3) South China. From lat. 28° southward the country is sub-tropical, always warm, usually hot and damp. There is little frost, and no proper winter season here. The most characteristic feature in the disease distribution of this division is the prevalence and stability of plague. Malaria is very common, and in addition there frequently occur epidemics of cholera, dysentery, measles, small-pox, dengue, and influenza. In this district is included Hongkong, which is a distributing centre for various affections, owing to its importation of troops from India and other countries where there are endemic foci of tropical diseases.

Apart from climatic distribution there are diseases which pervade the length and breadth of the country. Of these the worst is tuberculosis, which is fostered by the insanitary habits of the people, who in the colder regions sleep on *k'ang* (stove-beds) and expectorate freely everywhere. Bone and gland tubercular complaints are on the whole more common than respiratory affections.

Bowel affections.—Dysentery and diarrhoea are very common. Typhoid fever occurs among Chinese, but generally in a less severe form than among Europeans. About 90 per cent. of the Chinese harbour intestinal parasites. A severe form of gastro-intestinal catarrh occurs with varying frequency in the summer months, especially in the Yangtse valley. It has the same symptoms and treatment as cholera, but differs from the latter in the absence of Koch's comma bacillus. It has been called clinical cholera. The mortality is about 12 per cent., and the disease, which is non-infectious, usually comes from eating unripe or over-ripe fruit, from drinking

unboiled water, or eating cold food which has been infected by organisms of the coli group.

Small-pox has long been one of the scourges of China, and in the absence of isolation the practice of inoculation which has prevailed there for centuries has probably helped to spread rather than to combat the disease. The value of vaccination is not fully realized by the Chinese, but it is a precaution which no European resident can afford to neglect.

Other diseases.—Malaria, influenza, elephantiasis, leprosy, undulant (Malta) fever, furunculosis, and a number of undifferentiated fevers, besides venereal diseases, occur with varying frequency, and may be said to be common all over China. Intermittent fevers are very common wherever the cultivation of rice is carried on near villages and towns. Plague is endemic and epidemic south of lat. 28°, but it is only met with in its epidemic form north of that line and arising from imported cases of the disease. A terrible outbreak of pneumonic plague occurred in Manchuria in 1910–11. A parasitic disease called schistosomiasis (several varieties), first observed in China in 1904, occurs with great frequency in the Yangtse Valley. It is due to a trematode worm, and its main symptoms are dysentery and progressive abdominal enlargement, anaemia, and emaciation. It has been found in foreigners, but occurs mainly in farmers, fishermen, &c.—those who have to wade in water. In one recent year it was reported from Wuhu that in some districts of the province of Anhwei 50 per cent. of the farmers were affected by it.

Health of Foreigners

China has no special climatic dangers for foreigners. With the exception of sprue (see below) and malaria and a few cases of sunstroke which occur annually, there are few diseases which cannot be avoided by following the simple rules of health regularly published by the Shanghai medical officer of health. These are :

(1) Eat and drink nothing which has not been recently cooked, boiled, or otherwise sterilized.

(2) Do not consume fruit, vegetables, salads, melons, &c., which have not been cooked or sterilized; food on which flies have settled; milk or cream which has not been boiled or sterilized; water which has not been boiled or filtered through a Berkefeld filter; aerated waters and other drinks except of best quality; alcoholic drinks during the hot weather; ice-cream, unless made of boiled materials; uncooked oyster; fish, from June to October.

The above are individual measures for the avoidance of all bowel disorders. Prompt isolation and disinfection, sanitary premises, vaccination, and the avoidance of any collections of water wherein mosquitoes could breed are other measures which will go a long way to prevent most of the other diseases that menace foreigners here.

Sprue is a disease which occurs oftener in Shanghai than anywhere else. It still remains an enigma to the medical profession as regards its cause. The two chief symptoms are ulceration of the mouth and a form of diarrhoea. If treated early a cure usually results, but neglected cases nearly always prove fatal. It very rarely occurs among Chinese, and its incidence in the foreign population is much greater among females than males. Bodily and mental depression and the presence of other chronic diseases are predisposing factors.

CHAPTER X

GOVERNMENT AND ADMINISTRATION

Intercourse between British officers and Chinese officials—Chinese system of administration—Administration under the Manchu dynasty—China really a democracy—Central Government—Government of the eighteen provinces—Manchuria and Turkestan—Provincial administration—Naval and military administration—Conclusion : Chinese administrative system still in state of flux.

THE changes of the past five years have complicated a subject which even in its original and time-honoured shape was already difficult enough for a casual visitor to understand. Perhaps the simplest way to unravel the difficulty would be to specify and describe the Chinese officers, civil, military, and naval, with whom British officers are likely to be brought into immediate contact, and then, having dealt with this practical question, to set forth clearly how these Chinese officers have been gradually evolved, and what relation they bear to each other.

INTERCOURSE BETWEEN BRITISH OFFICERS AND CHINESE OFFICIALS

There are only a few places where are to be found civil officers of sufficiently high rank to exchange visits on equal terms with a British naval officer of flag rank. These are Canton, Nanking, Tientsin, and Peking. Hankow and Foochow are quite qualified also, but owing to the less convenient access to these two places the exchange of visits has in the past been more occasional and exceptional. Previous to the overthrow of the imperial régime and the establishment of a republic in the winter of 1911–12, it was always most advisable to place the arrangements for a visit in the hands of the Consul-General or Consul, for there were always little

galling questions of etiquette to consider, which often assumed an exaggerated value in the eyes of the Chinese, and afforded ill-disposed 'mandarins' opportunities to establish inconvenient precedents, and thus to enhance, in the people's eyes, their own dignity and the prestige of the empire at the cost of the foreign officers' position and the status of Great Britain. Without labouring this point or entering into petty detail it may be said that, however republican or constitutional-monarchical changes may have recently changed the manners, the dress, the salutes, and so on, the inborn disposition to magnify China still renders it prudent for a British officer of high rank to place his case, be it a matter of courtesy or of business, in the hands of the consulate. At the present time the only two provincial civilian officials of equivalent rank are called the *chiang-chün* (a military title, the holder of which is none the less a sort of co-governor) and the *hsün-an* (a civilian title, the holder of which often exercises military power). These two officials occasionally act, temporarily or more or less permanently, for each other during absence on leave, and in case of death, dismissal, or urgent business away from the seat of provincial government.

Captains, commanders, lieutenants in command, &c., will find at most of the treaty-ports an official of consular or consul-general rank (as arranged by the early treaties). His duties are usually combined with the superintendence of the Maritime Customs, and his present title is *taoyin*; but as *tao* or 'circuit' is still the basis of his designation, it is extremely probable that the pre-revolution title of *taotai* will remain in popular use. Apart from visits of courtesy, naval officers at Shanghai may have occasion to visit this official in connexion with questions touching the Woosung Bar, or junks impeding the channel, or landing men for exercise and drill, securing supplies of meat in times of drought, and so on. Under ultra-modern conditions many Chinese officials wear European clothes, and are occasionally European or American university men, so that for this or other reason they might resent the interposition of the consulate; but none the less

a British officer inexperienced in the tortuous ways of Chinese official thinking will always be safer if he works through his own countrymen on the spot. At Canton and Tientsin the *taotais* are not visited so much: on the other hand, at Hankow and Foochow (at the last-named place head of the 'foreign board') exchanges of visits are probably as frequent now as they used to be.

The *hsien* or *hien* is the executive magistrate or governor of every walled city, with its thousand square miles or so of country area, and, as will be explained later on, is one of the most ancient officials, the true back-bone of administration in all its branches. His *yamên* or public residence, including offices, prison, &c., is invariably inside the city walls, and, as few treaty-ports are actually within easy sight of the city walls, it is only in exceptional cases that the naval officer will have direct dealings with the *chih-shih* or 'affairs knower' of the *hsien*: previous to the 1911 revolution his title for many centuries had been *chih-hsien* or '*hsien*-knower'. The *taoyin* above described has never any city of his own: he is the link between the two high officials first described and the *hsien*, within the walls of which nearly all the *yamêns*, civil or military, are congregated. Sometimes, as at Tientsin, the highest official *yamên* may be outside the walls; but there is always a special reason for this exception. The original *yamên* of the viceroy of Chihli province was at the provincial capital, Paotingfu, and he only paid occasional visits to his temporary quarters at Tientsin: after the treaties of 1860 were made this temporary residence gradually became permanent; but the other high officials still exercise their functions at Paotingfu, whilst the *chiang-chün* (former viceroy, or more properly governor-general) is now a fixture at Tientsin.

In later Manchu times there was a steady flow of distinguished foreign visitors—princes, statesmen, admirals, generals—passing through Tientsin in order to have audience with the Emperor, with or without the Dowager at Peking. These visits only became reasonably possible, and therefore

frequent, after the Japanese war of 1894–5, when the railway from Tientsin to the coal-mines had been extended to the sea and to Peking. Previous to that a pilgrimage of four days in boats, springless carts, mule-litters, or the donkey-saddle did not appeal strongly to the high foreign official. The viceroys at Tientsin, ever since 1870, have usually been closely associated with the foreign affairs of the Peking Government, and therefore visits to them were in business matters almost the equivalent of visits to the Foreign Board. In any case the Consul-General at Tientsin is the officer into whose hands arrangements will still fall, at all events until the foreign visitor finds himself safely in the official charge of his own Legation.

Chinese System of Administration

Proceeding now to the consideration of the Chinese administration in general, we must refer to Chapter V, which will in many places supplement explanations given here. From ancient times the Supreme Ruler, whatever his exact title at the time, has always been revered as a semi-sacred personage. At first he reigned over a great number of practically independent home-ruling princelets : then these sub-rulers, much like those of the petty states of ancient Greece, consolidated themselves into a much smaller number of ' powers ' ; until we find the Emperor very much in the position of the Popes of Rome when they still held on to the last remnants of their territorial sovereignty and endeavoured to calm their unruly kings.

These great Chinese powers, under different names from those in colloquial use now, were practically the same as the provinces of to-day, the main difference being that instead of, say a dozen absolutely independent principalities or kingdoms being morally or nominally subject to a nebulous superior, for the past two thousand years unmistakably subordinate provinces, ruled by non-hereditary governors, have been controlled in the interests of the reigning house and the official

class supporting that house without much regard for the welfare of the people, beyond tacitly allowing to the people a considerable measure of liberty subject to the one condition that there must be no political agitation or disturbance of public order. This simple arrangement has continued through successive dynasties, with minor changes and qualifications, down to our own times.

Administration under the Manchu Dynasty

It will therefore suffice if we take the late Manchu dynasty—which on the whole was the most practical and moderate the Chinese ever had—as a sample for all. In this case the ruling house sat in proud detachment securely at Peking, reserving to itself simply the right to bestow and to cancel lucrative appointments. It maintained in addition Manchu garrisons at important centres in the provinces, just as we maintain cantonments in India. Apart from the duty of forwarding punctually to the capital a fixed amount of money or grain every year chiefly derived from the land-tax and salt gabelle, the provincial governors (as often Chinese as Manchu) were practically left to administer as they pleased, subject only to time-honoured custom ; the minor officials in turn (almost exclusively Chinese) had the same liberty in administration, subject again to the restraints of custom. Finally, the people themselves were left to manage their own municipal, rural, educational, social, religious, commercial, artistic, and, it might almost be said, legal (especially as to family) matters themselves, on the tacit understanding that the Emperor's own will, or his will as enunciated by his duly commissioned officers, must never be thwarted.

China a Democracy

Thus China, though apparently from our point of view an absolute despotism, has been in fact a huge democracy. Custom, which has always followed the lines of the ancient teachings, has restrained the Emperor and the Emperor's

officers quite as much as it has restrained the Emperor's lieges. None but strong and just monarchs could resist the customary reproving right of their censors and upright advisers with any show of success, and with just and strong Emperors such resistance was as likely to be popularly approved as not. All officials were by unwritten custom allowed (if they wished it) to make their fortunes out of their posts ; but if in so doing they stepped beyond customary bounds they were liable, if exalted, to be successfully impeached by their colleagues or even their subordinates ; if subordinates, to be suspended, reported, or even removed by their provincial superiors. 'Strikes,' or wholesale shop-shutting, have always been a favourite and usually successful popular method of forcing officials, whether high or low, to resign or to capitulate.

As there has never been any caste or aristocracy among the Chinese themselves, apart from the aristocracy of holding the Emperor's commission, and as, with the exception of certain customary pariah classes, the humblest Chinese if educated in accordance with custom could enter the examination lists and aspire to any official post either in the provinces or at Peking, it follows that most unofficial Chinese had either a relative or a friend in the official body, and therefore had a sort of personal interest in keeping intact the ruling classes' preserves. Thus the whole Empire lived on the give-and-take principle in a state of easy-going content perhaps unequalled in any European country, until the aggressive foreigner appeared upon the scene and step by step disturbed this self-satisfied harmony.

Central Government

The Government at Peking had a comparatively easy time. There were six 'boards' or departments roughly corresponding with our secretary of state distinctions, with (in order of precedence) the following duties. The Civil Office made or approved all appointments, dismissals, promotions, and transfers. The Finance Department saw to the prompt remittance

of revenue, and to grants in aid, disbursements, coinage of copper 'cash', and appropriations to the fisc or private treasury. The Ceremonial Office dealt with customary worship or sacrifice, whether to gods or to the ancient sages, and in this last connexion it had chief say in the matter of education, so far at least as public official examination tests were concerned. The name War Office speaks for itself, and includes 'naval' appointments, which, until the 'sixties, never meant more than lacustrine or riverine guard-boats, and, along the coasts, a few sailing junks charged with the duty of checking pirates or salt and opium smugglers. The Punishment Board was a Court of Appeal or Rehearing as well as the chief prison for state offenders, besides receiving legal (criminal) reports from the provinces, checking and readjusting sentences, reviewing and supplementing the statute law, eked out by 'judge-made' law, imperial rescripts, and modern requirements. There never was any civil law beyond custom. The Office of Works dealt with constructions, dikes, embankments, Imperial Tombs, roads, communications, &c., so far at least as the provincial authorities or the people themselves did not quietly and at their local expense see to their own interests more economically and effectively.

During the first 150 years of the dynasty all these departments worked well, ancillary to the personal efforts of capable Emperors. The central revenue (say £15,000,000 a year at the then prevailing gold rates) was more than ample, so much so that one Emperor ordained that 'no matter how the population may increase, the land shall never pay a higher tax per acre than it now pays'. Most expensive wars were conducted, north, south, and west (never east); yet there were still 'cakes and ale' for everybody. The revenue literally could not be got rid of, though at that time there was no Maritime Customs to speak of (beyond lucrative billets for Court favourites at Canton and a few other places); no *likin* or petty interference with local traffic; no loan of any kind to pay off, for none was required; none of the minor taxes recently introduced, such as those on tobacco and wine,

stamps, &c.; the provincial governments were allowed a free hand with pawnshop and other licences, ships' trading papers, land-transfer fees, and other perquisites that went to swell the mandarins' fortunes.

During the nineteenth century, however, an era of vicious, incompetent, or child monarchs supervened. The opium traffic (the real responsibility for which is not always fairly apportioned) sapped the vitals of the people; foreign trade, foreign religions, foreign diplomacy, and foreign wars combined to revolutionize the old idyllic if ignorant life; the above-mentioned six boards became corrupt; provincial authorities high and low joined in inordinate 'squeezing'; justice was bought and sold; the land was devastated by rebellion; the Manchus lost their manly martial qualities both at Peking and in the dozen or so of provincial cantonments; the natives, who for 2,000 years had never seen or heard of political equality with imperial China, developed inhospitable anti-foreign qualities: in short China rapidly went from bad to worse, until at last the old order of things was discarded, and she is now attempting her first uncertain steps in the paths of modernity.

Of course there is much more to be said about the Central Government in detail, the Imperial Family, the Court usages, the Manchu, Mongol, and Chinese Banner Organization, the Tombs, the Privileged Princes, the Seraglio and Privy Purse, the ornamental and sinecure appointments or offices, the Censors, Aediles, City Police, Temples of Heaven and Earth, Confucius, Tibetan Lamaism, and many other matters; but none of these have a natural place in a short sketch.

Government of the Eighteen Provinces

Having thus shortly disposed of Peking we proceed to the Eighteen Provinces, as China Proper was called before the Three Manchurian Provinces and the New Dominion (Chinese Turkestan) were added a generation ago. These are:

1. Chihli, 'Direct Jurisdiction'.

2. Shantung, ' East of the (T'ai-hang) Mountains '.
3. Shansi, ' West of the (T'ai-hang) Mountains '.
4. Shensi, ' West of the Shen (Passes)'.
5. Kansu, ' (Province containing) Kan-(chowfu and) Su-(chow) '.
6. Chekiang, ' The River Chê '.
7. Honan, ' South of the (Yellow) River '.
8. Anhwei (Anhui or Nganhwei), ' (Province containing) An-(king and) Hwei-(chow) '.
9. Kiangsu, ' (The Yangtse) Kiang (in relation to) Soo-(chow) '.
10. Kiangsi, ' West of the (Yangtse) Kiang '.
11. Hupeh, ' North of the Lake '.
12. Hunan, ' South of the Lake '.
13. Szechwan (Ssŭ-ch'uan or Szechuen), ' Four Streams ' (cf. Pănjáb).
14. Yunnan, ' South of the Cloudy (region of No. 13) '.
15. Kweichow, ' Noble Region '.
16. Kwangsi, ' West (part of the old) Kwang-(nan province) '.
17. Kwangtung, ' East (part of the old) Kwang-(nan province) '.
18. Fukien, Province containing Fu-(chowfu and) Kien-(ningfu) '.

In the Pekingese dialect Nos. 3 and 4 are only differentiated by ' tone '. No. 15 in another tone would be ' Sprite Region ', as it seems to have been originally called in practice before (A. D. 1370) a new dynasty formally erected it into a province. The simple and appropriate meanings of all the other provinces are obvious.

More will be said presently about changes in topography and administration between 1911 and 1916, but it is well to know first the basis of them. The fundamentary principle upon which the above eighteen provinces of genuine China proper were ruled previous to 1911 was that each one should have a responsible governor assisted and advised by a provincial treasurer and a provincial judge, all these three

appointments being direct from the throne. All other provincial civilians being complete subordinates (not advisers) of the governor, the situation as stated is thus clear. But the interests of some provinces were so divided that in those cases a governor-general shared with the governor certain duties. And though the governor-general in a broad sense discharged the military and foreign or diplomatic duties whilst the governor managed the civil and fiscal business, yet in practice the two were co-ordinate, and their powers were so checked that in most cases neither could act singly or without the advice of both the treasurer and the judge. So much was this so that if either or both governors made mistakes or exceeded his powers, the treasurer, with or without the judge, could impeach either or both the superior officers in direct memorial to the Emperor.

In two cases provinces had a governor-general alone, and this was apparently because of their huge area, or because the military and diplomatic situation required prompt undivided action, the treasurer and the judge confining their advice to 'regular' government matters. Thus Chihli in its north parts beyond the Great Wall was governed by two Tartar (Manchu or Mongol) military commandants at Kalgan and Jehol respectively, both in civil and military matters, subject, however, to the governor-general's approval in certain matters, and subject also to certain reserves as to whether Chinese or Mongol interests are involved. In the case of Szechwan the whole west is largely Lolo or Tibetan or quasi-Tibetan, so much so that of recent years the question of creating a new western province had been nearly realized; and a separate Commissioner for the Tibetan frontiers occupied a half-civil, half-military post somewhat akin in principle to those of Jehol and Kalgan, except that 'Tibetan' took the place of 'Mongol'.

Three ancient provinces forming part of Old China were administered by governors alone without the interference of any governor-general. These were Honan, the true 'Central Kingdom'; Shantung, the birthplace of Confucius, and before

his time the great centre of learning, of resistance to the Tartars, of military and economic science; and Shansi, the ancient centre of salt and iron industry. Shansi has a separate military governor at Kukukhoto (Kweihuating), similar in principle to those at Kalgan and Jehol, except that he has to secure the goodwill of a governor instead of a governor-general.

In five other cases—Kansu, Hupeh, Yunnan, Fukien, and Kwangtung—there were no governors, governors-general (usually styled viceroys by foreigners) officiating as such.

The Viceroy of the Two Kiang (Liang-kiang) had his seat and also his separate treasurer at Nanking, whilst the three governors of Anhwei, Kiangsi, and Kiangsu had their seats at Anking, Nanchang, and Soochow respectively, each with his treasurer and judge. Anhwei and Kiangsu were once the single province of Kiang-nan, and this is why the term 'Two' Kiang is still in use: in fact, for most unofficial purposes even the term Kiang-nan is still in use. A further complication arises from the fact that ten or a dozen years ago it was decided to create the northern part of Kiangsu into a separate province of Kiang-pei or 'North of the River', but after it had been pointed out that Kiangsu was already the smallest but one in area of all the Eighteen Provinces, it was decided to establish a sort of military-civil governor for this salt-producing, lake-canal region.

The Viceroy of Min-Chê (the ancient countries of Fukien and Chekiang) had his seat at Foochow, with governors at Foochow and Hangchow: previous to the French 'war' of 1884–5 the island of Formosa, governed by a *taotai*, was under the Governor of Fukien as occasional 'visitor'; but in consequence of French action the Governor of Fukien was ordered to reside permanently in Formosa, his continental duties being taken over by the Viceroy. Since the Japanese occupation of Formosa in 1904–5 no fresh Governor of Fukien has been appointed.

The Viceroy of Yun-Kwei had his seat at Yunnan city with a governor at Kweiyang, capital of Kweichow. In the same

way the Viceroy of the Two Kwang at Canton had his seat there with a governor at Kweilin, whilst the Viceroy of the Two Hu (also called Hu-Kwang or 'Lakes' Expanse') had his seat at Wuchang (opposite Hankow) with a governor at Changsha.

With regard to the above-described provincial staffs the whole arrangement has, after innumerable temporary shifts and changes in title, been reconstituted in name since the revolution of 1911. The Viceroyalty of Shen-Kan is peculiar, and will be treated of in the next paragraph. The uniform simple arrangement is now as follows : Each of the Eighteen Provinces has a Chinese *chiang-chün*, and this highest officer is in supreme command of all military matters ; each of the same provinces has also a Chinese *hsün-an*, in supreme charge of all civil matters. Thus there are no ' double-barrelled ' men, civil or military, and there remains no excuse for the continued use of the somewhat mistaken word ' viceroy '. The treasurer and the judge continue to exist, but under changed names and in a more subordinate position than before, and without the power of ' advising ' or ' taking the joint initiative ' that existed as a kind of check under the Manchus.

Government of Manchuria and Turkestan

There remain to be considered the three Manchurian provinces and the province of Sinkiang or ' New Dominion '. Previous to the Sino-Japanese War of 1894 the Manchurian provinces had been under the military administration of Manchus, *chiang-chüns* and *tutungs*, and had been non-regulation territories where officers might rule more or less irresponsibly ; and the general Peking policy had been to make the whole region an inhospitable buffer state between Russia and Korea. The history of subsequent changes has been long and intricate ; suffice it to say that now they each have a Chinese *chiang-chün* and a Chinese *hsün-an*, with staffs as above described. But in this case it has been found necessary to give the *chiang-chün* at Mukden a sort of vice-

regal control of the other two at Kirin and Tsitsihar, the reason being that the practically joint occupation of Japan and Russia with China, in consequence of their railway administration rights, makes it undesirable for either of the two northern functionaries to have a free hand in foreign affairs—as happened in 1900, when the indiscretion of Tsitsihar brought on the massacre of Chinese at Blagovestchensk.

Sinkiang is an extension of the already (previous to the conquests of 1874) extended Kansu, and under the empire its relation to the Viceroy of Shen-Kan was peculiar. The Viceroy's seat was at Lanchowfu, the capital city, commanding a fine German-built bridge over the western Yellow River; the treasurer and judge were also stationed there, but there was no governor. The Governor of Shensi was at the ancient capital of Sianfu, of course with his treasurer and judge. Sinkiang, with a governor at Tihwafu (the official name of Urumtsi), had a treasurer and an inferior class of judge, *in partibus*, so to speak, and was practically independent ruler of Turkestan with its Turki inhabitants up to the Altai, Pamir, and Himalaya ranges. The above four provinces, i. e. Manchuria and Turkestan, may in a general sense be said to be now ruled, like the purely Chinese eighteen provinces, by a Chinese *chiang-chün* and a Chinese *hsün-an*, with a treasurer (whose financial power is increased) and a judge (whose judicial power is increased), neither of whom is any longer advisory, and both of whom are more subordinate, in a general sense, than before.

Provincial Administration

Having now obtained a definite outline view of the relations between Peking and the provinces, we are in a position to express in much simpler terms the provincial administration. As before stated, all China Proper consists of about 1,500 *hsien*, that is, each a walled city and an area of, say, a thousand square miles. The *chih-shih* (formerly *chih-hsien*) had all powers in Manchu times, judicial, executive, tax-collecting, religious, and (subject to the special controls to be later

described) even joint military and joint educational : he had under him a number of assistant commissioned officers in control of great ports, great marts, and often even of great walled cities within his own thousand-mile jurisdiction. He was, in short, up to 1911, the Emperor's direct representative, the mayor, the sheriff, the lord-lieutenant, the judge of assize, the port authority, the collector all in one. He was (if he chose to be) a thoroughly effective man.

Each province had from fifty to over a hundred *hsien*, and every group of from three to ten *hsien* fell under a singularly *in*effective officer called a *fu* : it is necessary to go into this because all maps up to 1911–16 will be observed to mark certain cities of the so-called first class as *fu* ; thus Canton is Kwangchow*fu*, and Peking is Shun-t'ien *Fu*. But in the whole history of China there never was such a thing as a *fu* city, nor had a *fu* ' mandarin ' any specific or easily definable duties : the particular *hsien* city in which he had his *yamên* or praetorium was called the ' head *hsien* ', and in the case of provincial capitals there were often two or even, in one or two cases, three head *hsien* clustered together within one wall, each *hsien* within that wall being (of course with its thousand-mile territory) a separate jurisdiction. Since 1911 the very name of *fu* has been totally abolished ; no such imaginary city exists, and the superfluous official over it, who was simply an intermediary between the effective *hsien* and the provincial government, has also been abolished.

Between the genuine *hsien* city and the imaginary *fu* city, it will be noticed on the maps there was a third, and this time an always real and walled city, called by foreigners a ' second-class city ' or a *chou* ; some of these were ' subordinate *chou* ' assimilated to a *hsien*, and some of them were ' independent *chou* ' assimilated to a *fu*, and having one or more *hsien* under their jurisdiction ; these superfluous names, both of *chou* cities and *chou* offices, have been abolished, and all such cities are now *hsien*.

Finally, the maps mark certain cities (chiefly in special or outlying regions) as *t'ing* (not always walled), and these were,

like the *chou*, either subordinate or independent; all these, too, have now become *hsien*. Thus a great simplification has taken place, much useless intermediary correspondence has been saved, and as a broad rule it may now be stated that every city, walled or (in the case of former *t'ing*) unwalled, is now a *hsien*.

In Manchu times a certain number of *fu*, independent *chou*, and independent *t'ing* were under the 'inspection' of a *tao* (i.e. *taotai*); no city ever was a *tao* city, and the official, like the *fu*, had his seat usually (not always) in this or that *hsien*: his routine duties were not quite so nebulous as those of the *fu*; because, apart from the mere intermediary or inspection class of *tao*, some of them had, in addition, special military powers, or custom-house powers, or judicial powers, or salt gabelle powers, attached to them. The republic abolished these for a short time, but after various tentative changes it ended by re-establishing them, with more practical distribution and slightly changed name.

To sum up the whole question. Peking now conveys its administrative orders to each provincial civil governor, who transmits them, as also his own independent urgent orders, direct to the *hsien*, who, however, in most routine matters, sends his reports or receives his directions through the distributor or *tao* (*taoyin*). The British officer, who from the nature of things will find it easier to grasp more or less familiar French historical development than unfamiliar Chinese, will perhaps get the main principles more firmly fixed in his mind if he starts with the French Revolution, pictures all France as one of Napoleon's imperial provinces, and the old French provinces as the nebulous Chinese *tao* and *fu*; finally, he must regard Napoleon's summary reduction of these loose provinces into reasonably proportioned 'tight' departments as the summary inclusion of all China into so many *hsien*, each under its own district magistrate or prefect.

There is another map confusion to avoid. The word *chow* (as in Kwangchowfu) has not the sense of *chow* 'city',

but means ' territory ' or ' region ', and occurs in the name of very many *fu*.

One more slight complication. There are numerous large trading towns or marts in China without more than ' village ' rank. Many have a hundred thousand or even half a million inhabitants. This is the result of a process of urban expansion, and is now going on anew in what may be called Russified or Nipponified Manchuria, and even in Mongolia, and to a certain extent Tibet. Hankow is a striking purely Chinese case in point; until about twenty-five years ago, when it became a *t'ing*, it was a mere *chên* or ' market-town ' under the petty *hsien* of Han-yang (across the Han river). This state of affairs may be compared to the mushroom growth of the port and mart of Liverpool, which a generation ago was, after Domesday theory, a mere appendage of Walton, itself a mere inland village, but possessing ' the ' church. The great Kiangsi pottery town of Kingtehchen is another instance. A third is the great salt industry of Tzeliutsing (= self-flowing wells) in Szechwan, where nearly a million of people are congregated. Then again, there are the *chi*, or ' fairs ', weekly, fortnightly, bi-weekly, or every tenth day; a deserted shabby street perhaps two miles long, with a scant population in rags, and a dismal row of mud houses in ruins is suddenly transformed on fair days into a bustling trade centre.

It must be stated that, despite all the above apparently complicated machinery, China is self-governed, except as to paying taxes. You may travel for days without seeing a trace of ' government ' in any form whatever. No passports, no game laws, no great distinction between roads and private land for convenient access, no sanitation, no police, no bell-man—in short, apart from the rebellions, family feuds, and riots which occasionally break out, the whole vast country, dirty, shiftless, and undisciplined though it may be, lives in a complete state of personal freedom, subject only to customary patriarchal or family restraints based on the old customary ethics as summarized 2,400 years ago by Confucius and his school.

Naval and Military Administration

A word must now be said about naval and military administration. As to the former, it never existed at all, in any form worth attention, until in the sixties Sir Robert (then Mr.) Hart began with some 'customs cruisers'. The next step was the establishment under French auspices of the Pagoda Anchorage (Foochow) building slip, and a few years later the arrival of Captains Lang and Ching with the four Armstrong 'mosquito gun-boats'. As the 'northern and southern navies' of Tientsin and Nanking, supported by the auxiliary transport services of Canton and Foochow, gradually worked their way towards effectiveness, the services of Captain Lang were again sought by China in the hope of making a better show than had been done when the French shattered the Chinese fleet off Pagoda Anchorage in 1884. Ten years later the Japanese, in spite of the efforts of Lang (who had meanwhile left China in disgust), performed the same operation for the Chinese fleet off Weihaiwei. Since that time, in spite of desultory spasmodic efforts to restore naval 'power', on the whole the wiser policy has prevailed of *ne quid nimis*, and partly for want of funds, partly for want of full consecutive authority (which the Government is chary of granting), a policy of waiting has up to the moment prevailed, under Admiral Sah and one or two other fairly capable officers who have received a British training, and of abandoning for the present any attempt to establish a serious fleet.

As to the army, apart from dynastic changes and all kinds of vicissitudes throughout 2,000 years of history, it may be mentioned that under the decadent Manchu dynasty it had fallen into a condition of ridiculous ineptitude. This had already been the case before in 1644, when the native Chinese dynasty of Ming, unable for 300 years to protect itself adequately against the Mongols and at last against its own native rebels, was easily conquered by the Manchus, armed with nothing better than personal courage and powerful bows and arrows. There were never more than a million or so of adult

Manchu men, and about a quarter of this number were after the conquest distributed over China, say 200,000 at and around Peking, and 50,000 in all at a few provincial garrisons, of which the chief were Canton, Foochow, Hangchow, Nanking, Hankow (near it), and the capital of Szechwan, in other words, at places which Manchu horsemen could not easily reach from Peking in a few days. When conquests were made in Mongolia, Tibet, Turkestan, Cochin China, &c., it was always by a Manchu command and with a backbone of Manchu stiffening; but the bulk of the work was done by Chinese troops, who as a matter of fact are excellent soldiers under proper leading and care.

It was never the policy of the Manchus to leave the Chinese general in charge of the Chinese troops in each province any superfluous power: the Chinese material, so useful when utilized by a specially deputed Manchu general, speedily degenerated when not longer wanted in times of peace. Not only so, but the Manchu garrisons themselves, each under a Manchu *chiang-chün*, began to degenerate after the conquests of the eighteenth century. The general sloth which set in immediately after this coincided with the missions of Lord Macartney and Lord Amherst to Peking. Not only did the then new Emperor, at the head of his Manchu troops, abandon the Tartar practice of frontier hunting as a training for fighting, but the Peking garrisons and provincial cantonments alike gradually took to a life of indulgence. During the whole of the nineteenth century they were seldom called upon to fight. As for the Chinese troops or 'green flags' the provincial generals, colonels, and minor officers made fortunes by pocketing the men's pay, and such few men as actually appeared under the colours on review days were usually the sweepings of the streets. No wonder that when the first British war of 1839–42 broke out, little serious Chinese resistance was anywhere met with, except at Nanking and Chinkiang, where at least the proud Manchus had the courage to commit wholesale suicide with their families.

In the second war of 1858–60 the allies had equally little

difficulty in sweeping before them the combined Chinese and Manchus at Tientsin and Peking. Japan in Formosa and Loochoo (1874), the Russians in Kulja (1870–80), the French in Tonkin (1883–4), the Japanese in Korea (1885)—each in turn made light work of Chinese military pretensions, until at last the Japanese war of 1894–5 forced China as a whole, apart from its effete Government, seriously to think, especially when Russia, Germany, France, and Great Britain took advantage of China's abject helplessness to extend their occupied territory in Liaotung (Manchuria), Kiaochow (Shantung), Kwangchowwan (south coast), and Kowloon (opposite Hongkong). When even Italy and Portugal began to show signs of acquisitiveness China at last began to bestir herself in earnest, and the feelings of the people, apart from the Government, found a vent in the formidable 'Boxer' outbreak; which in turn led up to the Revolution of 1911, the Republic of 1912, and the abortive Constitutional Monarchy of 1916.

During the past ten years the once despised military classes have come into their own: formerly no decent educated man would be a soldier, and even the successful campaign generals, such as Tsêng Kuo-fan, Tso Tsung-t'ang, and Li Hung-chang, were always civilians. The Manchus at last set the example in 1906 by giving their princes military education and commands; the better classes of Chinese quickly took the cue, and now the military are in a fair way of becoming the 'praetorian' masters of China.

Conclusion

It must not be forgotten that the administrative system of China is still in a state of flux, and a vast amount of energy is being daily manifested by the various departments of state. Much of this is experimental and tentative, and may at any moment collapse under rebellion and anarchy. Consequently nothing is here said of the working of the new educational system; the provisional gendarmerie; the schools of agriculture and industry; the head customs control, nominally also in supreme charge of the foreign maritime customs; the

improved salt gabelle, vastly extended under the management of Sir R. Dane; the numerous central and provincial foreign and native adviserships; the diplomatic officers dispatched by the Peking Foreign Office to many of the provinces and great commercial centres; the new prison acts, and the different grades of justice; the 'country-clearing' or order-restoring military commissions; the stamp act, land transfer acts, licence acts, wine and tobacco monopolies, &c.; in the administration of all which the *hsien* or new prefects will always take a practical share.

CHAPTER XI

BRITISH LAW AND ADMINISTRATION OF JUSTICE IN CHINA

Definitions—Exterritoriality—British Administration of Justice in China—The Law administered by British Courts—British Law special to China—Treaty Ports—Mixed Court—Foreign Possessions and Protectorates

Definitions

'China' excludes Hongkong, Wei-hai-wei, Macao, Dairen, and Tsingtau (Kiaochow).

'Foreigner' includes British subject and excludes Chinese subject.

Exterritoriality

The cumbrous word 'exterritoriality' expresses the fact that persons live within the confines of any State under foreign law and foreign administration of justice, and not under those of the territorial sovereign. In China the subjects of the Treaty Powers—that is, of those States which have treaties with China—are amenable in China only to their own law administered by their own officials: thus a British subject is amenable to English law administered by British courts, a French citizen to French law administered by French courts, and so on; and a Chinese, of course, to Chinese courts. This system is very inferior in completeness and symmetry to the plenary jurisdiction of the territorial sovereign; but it works in practice more smoothly than could be expected. Its reason is, generally, the difference between Western and Eastern civilization, and, specifically, that in China, as in the old type of Asiatic Empire, punishments are barbarous and justice is administered according to good conscience (supposing that the conscience in question is good), whereas in Western States we have adopted in modern times more humane punishments, and have learnt from the

Romans to distrust the individual conscience, and to prefer the reign of positive law, to which the judge is bound to conform.

British Administration of Justice in China

Our Legislature has provided for the administration of justice to British subjects—that is, to all persons who owe allegiance to His Majesty or enjoy His Majesty's protection—by conferring upon the King the power to legislate for British subjects in China by Order-in-Council: this power now rests upon the Foreign Jurisdiction Act, 1890. Such Orders are made by the King, with the advice of His Privy Council, from time to time as the needs of the day may require. The principal China Order-in-Council, dated October 24, 1904, establishes a Supreme Court with two judges resident at Shanghai, and Provincial Courts, with the consul as judge, in the consular districts, the whole territory of the Chinese Republic being divided into 28 consular districts (the limits of which will be found defined in the Foreign Office List). More important civil and criminal cases are heard everywhere by a judge of the Supreme Court, the jurisdiction of which corresponds roughly with that of the High Court in England; while the jurisdiction of the Provincial Courts corresponds roughly with that of the County Courts and of justices of the peace in England. There is an appeal from a Provincial to the Supreme Court, and an appeal in civil cases from the Supreme Court to His Majesty's Privy Council in London. Further, there is an appeal, civil and criminal, from a judge of the Supreme Court to the Full Court consisting of both judges sitting together.

The Law administered by British Courts

The law administered by the above courts is to be found:

(*a*) in Acts of the Imperial Parliament when these are made in express terms to apply to His Majesty's foreign jurisdiction, e. g. the Regimental Debts Act, 1893;

(*b*) in Orders-in-Council.

The law falling under (*a*) is very sparse : the great body of the law falls under (*b*). The Orders-in-Council, generally speaking, apply to His Majesty's subjects in China, English law for the time being in force in England, but subject always to the special provisions of the Orders. The way to ascertain the law is therefore to inquire : Is there a special provision in the Orders ? and if there is not, then to inquire : What is the law of England ?

Again, subordinate legislation enacted in England by administrative orders of the various departments, under the authority of some Act of Parliament, is exercised in China by King's Regulations, e. g. Harbour, Pilotage, Prison, and General Port Regulations. Such regulations are made by His Majesty's Minister, and approved by the King through the Secretary of State, under the authority of art. 155–9 of the Order-in-Council, 1904.

Again Municipal By-Laws are made by the council of the settlement or concession in question and confirmed by His Majesty's Minister.

Law special to China

The general provisions of the law of England are known or can be ascertained : it will suffice if the more important provisions special to China are detailed here.

Smuggling.—Art. 70 of the Order-in-Council, 1904, makes smuggling or the attempt to smuggle into or out of China punishable by fine and imprisonment.

Levying War.—Art. 71 makes taking part in any operation of war in China punishable by fine, imprisonment, and deportation.

Piracy.—Art. 72 provides that the Supreme Court may try piracy wherever committed.

Violation of Treaty.—Art. 73 makes violation of any Treaty between His Majesty and China punishable in accordance with the provisions of the Treaty.

Sedition.—Any person publishing matter calculated to excite tumult or disorder may be tried and punished by the Supreme Court.

Offences against Religion.—Any person who publicly derides, mocks, or insults any religion or any religious service in China may be imprisoned and fined.

Deportation.—Where there is reasonable ground to apprehend that the conduct of any person is likely to produce, or excite to, a breach of the peace, he may be required to give security, and, on his failure, be deported from China.

Registration.—Every resident British subject shall in January of every year register himself at the Consulate of the consular district within which he is resident, failure subjecting him to fine and imprisonment.

Treaty-ports

Before the war of 1839–42 China was closed to foreigners, except a strangled trade with Canton. A treaty-port means a place opened by treaty to the residence and trade of foreigners. The ports vary in respect of the conditions under which foreigners reside at them ; and something must be said here about these conditions.

(*a*) Shanghai. The district open to foreign trade is called the International Settlement—an area within which foreigners are free to buy land, and to live under their own Municipal Government. The Municipal Charter is contained in the Land Regulations under which local government is vested in a popularly elected Council. That Council is the municipal authority not only for resident foreigners but for more than half a million Chinese inhabitants. The Council employs a large staff of civil servants and a police force nearly 2,000 strong : it has been very successful, and Shanghai enjoys a singularly efficient municipal government.

The French occupy a contiguous area which they call the French Concession.

(*b*) Canton, Tientsin, Hankow, Kiukiang, and Chinkiang. At these ports the land occupied by the British community is a concession to His Majesty's Government, and not a settlement as at Shanghai. A concession as we use the word in China is an area leased by the Chinese Government to His

Majesty's Government, and sublet in small building lots to British merchants, who manage their own municipal government through an elected council.

At Tientsin and Hankow similar concessions are also held by other Treaty Powers.

(*c*) Other Ports. At the other ports the area within which foreigners may live has usually not been strictly defined, nor do they enjoy formal municipal rights, although some attempt in that direction is often made by a road committee, or some such body.

Mixed Courts

Although Chinese living within the settlement at Shanghai or the concessions at Canton and the other ports above mentioned are subject to Chinese administration, it has been found that the Chinese magistrate requires stiffening both in respect of character and of knowledge of law: this has been done by requiring that a foreign assessor shall sit with him in all cases in which a foreigner is plaintiff, or in which foreign interests are concerned. The court so formed, i. e. by a Chinese magistrate and a foreign assessor sitting together, is known as the mixed court, a term which, without explanation, might lead one astray, because this term was applied in Egypt to a very different institution. The large Chinese population and the wealth of the Shanghai settlement have made the Shanghai Mixed Court an important tribunal dealing with an immense mass of business, and having often thrown upon it the difficult duty of finding a rule to apply to those civil claims for which Chinese custom does not provide.

Foreign Possessions and Protectorates

Hongkong. This is of course British territory, enjoying the usual institutions of a crown colony.

Macao is a Portuguese possession administered by a governor.

Weihaiwei is a territory leased by the Chinese to the British Government, with plenary jurisdiction over the

Chinese inhabitants. It is administered by a commissioner with magistrates and a judge who is usually resident at Shanghai. The law administered is British law under Orders-in-Council, as in China Proper, except that for Chinese due regard is had to native custom.

Kuantung (capital, Dairen) is a territory leased by Japan.

Tsingtau (Kiaochow) is a territory formerly leased by Germany, but now in the occupation of Japan.

Kwangchowwan is a territory leased to France, and under the administration of the Governor of Indo-China.

CHAPTER XII

ECONOMIC GEOGRAPHY OF CHINA

Introduction—Natural Regions—North China—Central China—Chekiang and Fukien—South China—Foreign trade.

Introduction

As the density of population in China averages over 200 to the square mile, it is obvious that the economic resources of the country must be considerable. Among these agriculture undoubtedly holds the first place, and the majority of the Chinese gain their living more or less directly by the cultivation of the soil. For this predominance of agriculture there are several reasons. The country falls almost entirely within the monsoon region of Asia, and the combination of summer heat and rainfall affords the conditions necessary for the production of rice and other important food crops over the greater part of the country. The pressure of an increasing population upon the means of subsistence has, moreover, been partly met by more intensive methods of cultivation. The development of irrigation, frequent and laborious tillage, and the careful utilization of the waste products of the community, have all contributed to an increased yield from the land. To such an extent, indeed, has the close cultivation of the soil been carried, that in places there is a population of over 2,000 to the square mile. Agricultural holdings are generally small, frequently they do not exceed an acre or two in extent, and the whole attention of the farmer and his family is devoted to obtaining from the land as large a return as possible. Under such conditions pastoral farming practically does not exist except upon ground too poor or too hilly for any other purpose. Oxen, donkeys, and buffalo are kept, but as beasts of burden, and practically every farmer owns pigs and poultry.

But although the Chinese cultivator displays the greatest industry, and sometimes an empirical knowledge of important agricultural principles, there is little doubt but that he might increase the return from the land by the adoption of more scientific methods of cultivation. This is more especially the case where processes of an industrial nature are involved. In the production of silk, for example, he has had to yield first place to the Japanese, and from many markets his tea has been driven out by that from India and Ceylon. In both cases a little timely foresight and a less conservative attitude would have done much to enable him to maintain his position.

Apart from agriculture the economic resources of the country have been but imperfectly developed. Mineral deposits are believed to be widely distributed, but their extent is not fully known, and they have up to the present only been partially exploited. Even where they are worked the methods employed are frequently of a primitive description, and the total output is relatively insignificant. Manufactures are widespread, but they are designed in the main to meet local needs, and are, with a few exceptions, of too rudimentary and inadequate a character to find a market abroad. In some of the ports modern methods have been adopted and modern machinery installed, but such concerns are generally in the hands of foreigners. In China as a whole it is probably still true that human labour is cheaper than machinery. In other respects also the country suffers from lack of development. There are few good roads, the means of transport are generally of a primitive description, rivers and canals are not utilized as they might be. Within recent years considerable progress has been made with the construction of railways, but here also much remains to be done, and until it is done economic progress must necessarily be slow.

Natural Regions

A study of the physical structure, climate, and vegetation of China enables us to distinguish three major geographical regions which we may respectively designate as Northern,

Central, and Southern China. In addition there are the provinces of Chekiang and Fukien, which are in a sense intermediate between Central and South China. A survey of the country can best be made by treating each of these regions separately, as the relations between geographical conditions and economic development will thus be more clearly brought out. At the same time it must be borne in mind that the comparative lack of statistical information which exists forbids that definiteness of exposition which would be possible in the case of a country whose economic resources had been systematically surveyed.

North China

Includes the provinces of Kansu, Shensi (north of the Tsin-ling mountains), Shansi, Honan, Chihli, and Shantung. Though these provinces lie in the main in the basin of the Huang Ho, the northern part of Chihli is drained by the Pei Ho and the tributaries of the Liao, much of Shantung by short rivers flowing directly to the sea, and the south-east of Honan by the affluents of the Huai. Nevertheless, they form together a fairly well-defined geographical region.

Kansu, Shensi, Shansi, the west of Honan, and the east of Shantung are mountainous, while the east of Honan, the greater part of Chihli, and the west of Shantung belong to the plain of the Huang Ho. Throughout the mountainous area, except in parts of Kansu and in Shantung, there are great deposits of loess, which are generally of considerable fertility. This loess, which is an earth of brown-yellow colour so soft that one can easily rub it to pieces with the fingers, is believed to be the product of rock-waste in Central Asia, carried from that region by the agency of wind and water. Its great fertility is probably due in part to the inclusion within it of organic matter derived from the decay of grasses growing upon its surface, and in part to capillary action, drawing from below ground water containing lime dissolved from the underlying limestone rocks. On the other hand it is very porous, and the crops grown upon it accordingly suffer in periods of drought,

while the practice of irrigation, in which the Chinese excel, is less feasible here than elsewhere, as the rivers have cut their way down through the loess on to the hard rocks below. On the plains of the Huang Ho also there are wide stretches of loess, although in the vicinity of the rivers sandy soils generally prevail.

The climate of the Huang Ho basin is more extreme than in any other part of China. Over the greater part of the region the winters are cold, and in many places the rivers are frozen for several months of the year. The summers are hot, and in July the mean temperature of the lowlands is at least 80° F. Precipitation varies with local conditions, but as a rule averages between 20 and 40 inches a year. Vegetation, of course, is mainly controlled by climate. The severe winters exclude most tropical and sub-tropical perennial plants from the region; on the other hand the hot summers permit the cultivation of cotton, and, in a few favoured localities, of rice. Otherwise the vegetation is, generally speaking, that of the temperate zone. Among the more common trees are the birch, beech, oak, pine, and poplar; the fruits include apples, pears, apricots, and peaches; wheat, millet, peas, and beans are among the staple food-stuffs cultivated.

Agriculture

In all parts of the region under consideration agriculture is an important pursuit, but among the districts especially noted for their fertility are the valley of the Wei in Shensi, the plain of Taiyüan in Shansi, the region drained by the Lo in Honan, and various parts of the Great Plain. In addition to the widely distributed food-crops already mentioned, some rice is produced in the valley of the Wei; cotton is grown in several provinces, but not to the same extent as further south, though it is said that the output of Shantung is steadily increasing; opium was formerly an important crop of Kansu, and is probably still grown to some extent; wild silk is obtained from silkworms which feed upon the leaves of the oak in

Honan, Chihli, and more especially Shantung. Among other industrial plants may be mentioned the soya-bean which is grown here, but not so extensively as in Manchuria ; ground-nuts, which are exported from Shensi and Shantung, and sesamum and gingelly, both of which are used in the manufacture of vegetable oils. The cultivation of fruit flourishes in various parts of the region, but is of special importance in the south-west of Shansi, in the south-west of Chihli, and in the west of Shantung. In Shantung also the vine is cultivated, and the manufacture of wine is an industry of some importance.

The timber resources of North China have been much impoverished. Reckless deforestation has been permitted, and except around the villages little replanting has taken place. There are still considerable forested areas in the south-west of Kansu, in parts of Shansi, and on the Tsin-ling mountains in Shensi, but elsewhere the land has been denuded of its most valuable timber. As a result the damage done by floods has in many cases been intensified, and much good agricultural soil has been washed away. Within recent years experimental plantations have been established by Britain and Germany at Weihaiwei and Tsingtau respectively.

Minerals

Such investigations as have been made have revealed the existence of considerable deposits of mineral wealth throughout the region, but comparatively little has as yet been done towards its exploitation. Coal is perhaps most widely distributed. Huge deposits of that mineral are known to exist in Shansi, where it is mined at Pingtingchow and elsewhere, but by native methods, and the output is not great. Much more important under existing conditions are the mines owned by the Kailan Mining Administration at Kaiping and Lanchow, about 80 miles from Tientsin. In 1914 these produced 2,780,000 tons of good bituminous coal. The Pekin Syndicate has mines at Tsinghwachen in Honan, where good steam coal and anthracite are produced. In Shantung the coalfields are found in the western part of the mountainous region, mainly

in Weihsien and Poshan. Some belong to a German company, while others are in the possession of the Chinese. Iron is also widely distributed, but it is not yet certain that the deposits are sufficiently great to assure the growth of a large iron industry. Other minerals, including gold, copper, and petroleum, are found in various parts of the region. Salt is obtained from a salt lake in the south-east of Shansi, and by evaporation from sea-water along the coast.

Manufactures

Manufactured articles are in the main produced by native methods. Woollen goods, much in demand on account of the cold winters, are made at Lanchowfu in Kansu and elsewhere. In all parts of the country the spinning and weaving of cotton is carried on as a domestic industry. Modern cotton mills, on the other hand, have been erected at Tientsin, Tsingtau, and several other towns. The manufacture of silk goods is an important industry in Shantung and Honan. Steam filatures have been established at Chefoo and Tsingtau, but much of the raw silk is still reeled by hand. The province of Shantung is also noted for the manufacture of pongees, which are made from the tussah silk produced by the wild silkworm. Straw-plait is an important product in the west of Shantung and the south of Chihli, where a suitable variety of wheat straw is grown.

Trade

In the upper part of its course the Huang Ho flows over a rocky bed, while in the lower part it is frequently obstructed by shallows caused by the deposition of material brought down from the loess region. It is, therefore, as a general rule, unsuitable for navigation, and no great port has developed near its mouth. Tientsin, on the Pei Ho, has accordingly become the great commercial centre of Northern China. It is at the meeting place of routes from Manchuria and Mongolia, as well as from the west and the south of China, and it serves as the main collecting and distributing centre of the greater part of the basin of the Huang Ho. Chefoo, on the northern shore of

the Shantung peninsula, has suffered greatly within recent years from the competition of the German (now the Japanese) port of Tsingtau on the southern shore. The latter, with its better harbour and with railway facilities, has diverted much trade from Chefoo which that port is unlikely to regain.

Central China

The basin of the Yangtse is in many respects the most important region in China. Physically it may be regarded as a series of steps downward from the Tibetan plateau, each of which has been tilted backward in such a way as to cause the formation of a lake basin between its eastern edge and the step farther to the west. These lake basins formed areas of sedimentation which have been wholly or partially filled up, and now consist to a great extent of fertile land. Szechwan, part of which forms the first step, is mountainous in the west and in the extreme east ; in the centre, at an elevation varying from 600 to 2,000 feet, lies the famous Red Basin. This basin is a region of great fertility, and one part of it, the Chengtu plateau, is probably the most densely populated agricultural area in the world. The next step downward is represented by the provinces of Hupeh and Hunan. In the former there is much fertile soil in the valley of its main river, the Han, but the hills are generally barren except in the west where they are forested ; in the latter, which is drained by the Hsiang Kiang, the Yüan Kiang, and the Tzŭ Kiang, the most intensively cultivated areas lie on the alluvial soils round the Tung-t'ing lake, into which they drain, and in the valleys of the rivers themselves, more especially in those of the Hsiang and the lower Yüan. The hills are cultivated in some places, forested in others. Farther to the east and at a lower elevation lie the provinces of Kiangsi and Anhwei. The greater part of Kiangsi is mountainous, but there are considerable areas of fertile soil round the P'o-yang lake in the north, in the valleys of the Kan and other rivers, and on the lower slopes of the hills. In Anhwei the chief agricultural areas lie in the south, in the valley of the Yangtse, and in the north, in the plain of the

Huai. Kiangsu, which falls to sea-level, is generally a plain, and, especially in the south, is of great fertility. The northern parts of Anhwei and Kiangsu, it may be here noted, belong climatically to the Great Plain of the Huang Ho.

The climate of the Yangtse basin presents a marked contrast to that of the Huang Ho. The summers are longer and hotter, while the winters are much milder. In January the mean sea-level temperature is about 40° F., but the thermometer frequently falls to freezing-point, or lower, and ice is sometimes found on the smaller lakes. The precipitation also is greater. South of the Yangtse the mean annual rainfall varies from 60 to 80 inches : north of the river it is between 40 and 60 inches except in the north-west, where it is less. As a result of these climatic differences a sub-tropical vegetation takes the place of the temperate vegetation of the Huang Ho basin. The bamboo, the camphor-tree, the mulberry, the banyan, the camellia, and the orange are all widely distributed, together with trees which produce wax, tallow, and varnish ; rice becomes the chief food of the people and is grown everywhere ; tea and sugar-cane are cultivated in various places ; China-grass and other fibres are grown. In addition, variations in altitude permit most of the plants of the previous region to thrive.

Agriculture

The general conditions under which agriculture is carried on in this region also differ from those which prevail in the north. Except over limited areas loess soils are not found. The possibilities of irrigation, on the other hand, are much greater, and in several provinces there is an extensive canal system devised partly for that purpose. The land is also more productive, as favourable climatic conditions make it possible to obtain two, and sometimes three, crops in the course of the year.

Opium was formerly one of the staple crops of the region, but except in the less accessible parts of Szechwan, Kiangsi, and Kiangsu, its cultivation seems to have been almost entirely suppressed. In Szechwan, where it was perhaps

most extensively grown, attempts have been made to replace it by cotton and wheat, in Hupeh by tobacco, and in Kiangsi by silk. The cultivation of the mulberry is the basis of the large and important silk industry of the region. Unfortunately the methods employed in raising the silkworm are still of a primitive nature, and, as has been frequently urged, even a slight advance in sericulture would lead to a largely increased yield of raw silk. Among the more important silk-producing provinces are Szechwan, which is noted for yellow silk, and Kiangsu, still more famous for white silk. Tea is an important crop in Hupeh, Hunan, Kiangsi, and Anhwei, Anhwei being noted for green teas, the others for black. Here again the methods employed, both in the cultivation of the tea-plant and in the preparation of the leaf, are unscientific, and China has almost entirely lost the British market because of her failure to produce a tea which is at once good and cheap. Cotton is extensively cultivated in the valley of the Han, in the lowlands of Hunan and Kiangsi, and in the delta lands of the Yangtse. The staple is short, but the best varieties are whiter and softer than Indian cotton, and there is a considerable demand for it both at home and abroad. The average yield per acre in China is estimated at 176 lb., which is considerably better than the Indian yield, and not far short of the American. It is said, however, that in the Yangtse basin crops averaging between 300 and 400 lb. to the acre are sometimes obtained. Within recent years various attempts have been made to improve the quality of the silk, tea, and cotton produced in this region, but it is questionable whether much progress has as yet been made. Other industrial crops include ramie, from which grass-cloth is made, tobacco, the demand for which appears to have grown with the suppression of opium, medicinal plants, indigo, hemp, and vegetable wax and tallow.

Minerals

In the region under consideration there are important deposits of coal and iron, though the mineral wealth as a whole

is probably not so great as in the basin of the Huang Ho. Coal is obtained by native methods in Szechwan, Hunan, and elsewhere, but the most important fields worked on modern lines are those belonging to the Han Yeh Ping Iron and Coal Company at Pingsianghsien in Kiangsi. These now produce over half a million tons per annum. At T'ieh-shan-pu in Hupeh the same Company also works what has been described as one of the richest iron mines in the world and from it obtains the ore which is used in the iron-works at Hanyang. China is the chief producer of antimony in the world, and much of her supply comes from Hunan, where it is widely distributed. The raw ore is treated for export at Changsha, where there now are important refining works. Lead and zinc are obtained in increasing quantities from the Shui-k'ou-shan mines, also situated in Hunan. Salt is an important product of Szechwan, where there are large brine-wells. Other deposits of mineral wealth throughout the region are but imperfectly known.

Manufactures

The basin of the Yangtse is one of varied industrial activity. The domestic manufacture of cotton goods is a common pursuit, and in Hupeh native workshops produce piece-goods for export to other parts of China. Modern factories for spinning and weaving cotton have been established at Shanghai, Hankow, Changsha, Tsingpo, and elsewhere. The manufacture of silk fabrics is followed mainly in those provinces in which the silkworm is reared, and Szechwan and Kiangsu are particularly noted for their piece-goods. Modern steam filatures have been erected at Shanghai, Chinkiang, and several other towns. At Hanyang, on the other side of the Yangtse from Hankow, one of the most interesting industrial experiments in China has been initiated. There, a Chinese company already mentioned (the Han Yeh Ping Iron and Coal Company), working on European lines but under Chinese control, has established important iron- and steel-works, and not only manufactures steel rails for use in China itself, but exports pig-iron to Japan and the United States. It also

controls the Yangtse Engineering Works, some distance lower down the river. The town of Kingtehchen, in Kiangsi, is noted all over China for the manufacture of porcelain and earthenware, the kaolin being obtained from decaying granitic rocks in the north-east of the province. Before the T'ai-p'ing rebellion the product was held in high esteem, but it now consists mainly of rice-bowls, which are sent to all parts of the empire.

Among the manufactures of Shanghai, which is becoming an important industrial centre, may also be noted ship-building, flour-milling, paper-making, brewing, and tanning. Miscellaneous native products of the Yangtse basin include Indian ink, indigo, paper, and furniture.

Trade

Shanghai, which is situated upon the Huang-p'u (Whangpoo), about twelve miles from its confluence with the Yangtse, is the most important centre of foreign trade in the whole of China. Not only does it serve the greater part of the rich and fertile Yangtse basin, but, owing to the absence of first-class ports farther north, it acts as the commercial entrepôt for much of the basin of the Huang Ho as well. It lies at a considerable distance from the sea, but is situated at the first point on the Yangtse suitable for a great port. Chinkiang is at the crossing-point of the Grand Canal and the Yangtse. Unfortunately the construction of the southern part of the canal is defective, and during periods of low water it cannot carry all the goods it otherwise would. Accordingly, since the opening of the Tientsin–Pukow railway some of the trade of Chinkiang has been diverted to Nanking, which lies on the Yangtse opposite to Pukow. The latter port is also connected with Shanghai, and with the further development of railway communications will probably assume considerable importance. Kiukiang, which is situated on the south bank of the Yangtse, near the mouth of the Poyang lake, is the port for much of the goods produced in the vicinity of the lake and of the rivers draining into it. Hankow, which is part of the great triple town of Hankow-Hanyang-Wuchang, has

grown up at the confluence of the Han with the main river. It is already connected with Peking by rail, and will eventually be linked up with Canton. When, in addition, the projected lines east and west along the Yangtse valley have been constructed, Hankow will not only be a great railway centre, but one of the most important commercial towns in the whole of China. Ichang is situated at the lower end of the rapids of the Yangtse, and here all goods for Chungking, the great port of Szechwan, were formerly transhipped from steamship to junk. Within the last few years, however, specially constructed steamers with cargo-floats in tow, have succeeded in making the passage to Chungking during a considerable part of each year. Were pains taken to remove some of the worst obstructions in the course of the river, the steamer traffic, and hence the trade of Chungking, would probably benefit to a great extent.

Chekiang and Fukien

The two provinces of Chekiang and Fukien occupy an intermediate position between the basin of the Yangtse and that of the Si Kiang. They belong in the main to the massif of Southern China, and the various ranges of which that massif is composed here run from south-west to north-east, or more or less parallel to the coast. The rivers are therefore short and swift, and communication with the interior is difficult. The north of Chekiang belongs to the delta of the Yangtse, but elsewhere there is little lowland except in the valleys of the rivers, and in order to obtain a cultivable area the hills are often terraced to a considerable height. In Chekiang especially, many of the hill slopes are exceedingly fertile, and both provinces are densely populated. The climate is favourable to the cultivation of many sub-tropical products. The summers are long and hot, and the winters are mild, the lowlands at least being protected by the hills from the cold winds of winter. The food crops include rice, wheat, and sugar-cane, the latter being grown mainly in the south. Tea was formerly an important product of both pro-

vinces, and that of Fukien had for long a very high reputation in the world's markets. Nowadays, however, most of that which is produced is consumed within the country itself. In Chekiang the mulberry is cultivated, and the manufacture of silk is an important industry; piece-goods noted for their excellence are woven at Hangchow and elsewhere. The camphor-tree is found in both provinces, and the distillation of camphor has for some years been extensively carried on. Unfortunately trees have not been planted to replace those cut down, and the end of the industry is said to be in sight. Cotton is grown throughout the region, and there are cotton-mills at Hangchow and Ningpo. Minerals are believed to be abundant in Fukien, but so far little has been done for their development.

Owing to the indented nature of its coast-line the region is provided with some good ports. Hangchow, on Hangchow Bay, is at the southern entrance to the Grand Canal. Ningpo, on the left bank of the Yung Kiang and near the south shore of Hangchow Bay, has considerable local trade. Amoy, situated on an island at the mouth of the Lung Kiang, has one of the best harbours in the south of China, and was formerly the great centre for the export of tea from Formosa.

South China

Consists of the four provinces of Yunnan, Kweichow, Kwangsi, and Kwangtung. The whole of Kwangsi and Kwangtung lie within the basin of the Si Kiang, but parts of Yunnan and Kweichow drain to the north and to the south of that river. The greater part of Yunnan forms a plateau with an average elevation of about 7,000 feet, but it is much cut up by mountain ranges. In the plains between these ranges there are considerable areas of fertile soil, and it is there that the bulk of the inhabitants are found. The valleys in the west and south of the province are generally unhealthy, and are in the main occupied by more primitive people. Kweichow is also mountainous; in the west the average

height of the land is about 5,000 feet, and in the east about 3,000 feet. Here, too, there are many high plains which are devoted to agriculture, but much of the land is infertile. In Kwangsi the elevation falls to 2,000 to 3,000 feet, and the greater part of the province is covered with hills. There are few large plains, and it is only in the east and south-east that there are extensive areas of cultivated land. After Kansu and Yunnan this province is the least densely populated in the whole of China Proper. In Kwangtung the land descends to the delta of the Si Kiang. The more mountainous districts are rocky and unproductive, but the lowlands are very fertile and yield valuable crops.

Throughout the whole region the climate is sub-tropical in the lowlands, but in the uplands varies according to altitude. The summers are long and hot, the winters are, on the whole, mild ; in January the mean temperature at Canton is between 55° and 60° F., though the thermometer occasionally falls below freezing-point. The mean annual precipitation varies from 60 to 80 inches.

South China, with the exception of the lowland area of Kwangtung, is in a more undeveloped condition than any other part of the country. For this there are several reasons. The physical structure of the region has afforded a refuge to the aboriginal inhabitants and has retarded the occupation and settlement of the country by the Chinese. The great distance from the seat of government has hindered the enforcement of order, and brigandage is still rife in many quarters. Further, competent observers are inclined to agree that in Yunnan at least the excessive use of opium has had a most disastrous effect upon the moral fibre of the population.

Owing to the varied topography and climate of the region its vegetation is probably more diversified than any found elsewhere in China. Among the principal trees in the lowland areas are ebony, mahogany, and teak ; the fruits include the banana, the pineapple, and the pomegranate ; caoutchouc, aniseed, and the trees which produce tallow, vegetable wax, and camphor are important from the industrial point of view.

Agriculture

As elsewhere, agriculture is the chief pursuit of the people. The food-crops include rice and sugar-cane, maize and other cereals. Opium was formerly an important crop in Yunnan and Kweichow, and it appears to be still cultivated to some extent in the less accessible districts. The suppression of the drug has undoubtedly caused great temporary loss to the farmers in these provinces. Tea is grown in Yunnan and Kwangtung, but the output of the latter province at least does not appear to be held in high repute. The wild silkworm is found in Yunnan, and in Kwangtung the mulberry is cultivated, but in neither case is the silk obtained equal to the best of that produced in the basin of the Yangtse. Among other vegetable products of this region are cotton, tobacco, cassia, spices, and ramie.

Minerals

The mineral wealth of the country is as yet but imperfectly known. Especially is this the case in Yunnan, where it is believed to be extensively distributed. The most important mines in that province at the present time are at Kokiuchang, near Mengtsz, where large quantities of tin are obtained by native methods. Among the other minerals of the region, which are all worked to a greater or less extent, are antimony, copper, lead, and zinc. Coal is plentiful, and is mined at several places, but chiefly at Shiuchow in the province of Kwangtung. It is not improbable that the future may show that the mineral resources of this region are of considerable value.

Manufactures

The weaving of cotton and silk goods, the manufacture of sugar, paper-making, and industries of a similar nature are all carried on in various parts of the region. In Kwangtung industrial activity is more varied, and Canton and Fatshan are important manufacturing centres where cotton, woollen, and silk fabrics, lacquer-ware, matting, paper, and pottery are all produced on a considerable scale.

Trade

Canton, which is the commercial centre for the whole basin of the Si Kiang, is connected by waterways with almost every part of the province of Kwangtung. It is also in easy communication with Hongkong, and large ocean-going steamers are able to ascend the river as far as Whampoa, twelve miles below the city. Within recent years, however, Canton has lost some of its trade to Wuchow, which is now the entrepôt for Kwangsi, and to Samshui, which taps the traffic on the North River. Steamers can ascend from Canton as far as Wuchow, but only during the wet season, and much of the trade of the former city, not only with Kwangtung and Kwangsi, but with the south of Kweichow and the east of Yunnan, is now carried on by means of motor-boats.

Owing to the mountainous nature of the country the west and north of Yunnan are difficult to reach from the basin of the Si Kiang, and much of the goods imported into these districts comes from Burma through Tengyueh to Talifu, whence it is distributed over a wide area, extending even into Szechwan. Various proposals for connecting Talifu with a Burmese port have as yet failed to materialize.

Foreign Trade

The chief exports of China include silk, soya beans, bean cake and bean oil, tea, cotton, sesamum, hides, straw-braid, tin, and various other articles mainly of an agricultural nature. For long China was the chief silk-producing country in the world, a position which is now occupied by Japan. The greatly extended use of soya beans and their products in Europe has led to a remarkable increase in the amount exported, and they now hold the second place among the exports of the country. They come, however, from Manchuria rather than from China Proper. Tea is exported principally to Russia and to the United States, the former country taking the bulk of the better varieties. The quantity sent to the United Kingdom does not much exceed 5 per

cent. of its total import. Raw cotton is both imported and exported. A certain amount of the Chinese product is sent to Japan, where it is preferred on account of its whiteness, while Indian cotton is imported for use in the mills of Shanghai and other towns.

The principal imports include cotton goods, rice, oil, sugar, metals, railway plant, fish, and coal. Almost 30 per cent. of the total imports consist of cotton goods, and come from the United Kingdom, India, Japan, and the United States. Piece-goods are imported mainly from the United Kingdom, but the United States and Japan are increasing their trade in certain directions. Cotton yarn, which is imported to serve as a strong warp along with a weft of Chinese cotton, is supplied by India and Japan. Opium formerly ranked next in value to cotton goods, but is now of much less importance. Rice is shipped from Indo-China mainly to the province of Kwangtung. Kerosene oil, which has rapidly sprung into favour in China as an illuminant, comes from the United States, Sumatra, and Borneo. Sugar is imported from Java, coal from Japan, and iron and steel goods from the United Kingdom, Belgium, Germany, and the United States.

CHAPTER XIII

THE FINANCIAL CONDITION OF CHINA

Currency—Taxation—Revenue—Foreign Debt—General Conclusion—The Chinese Customs and *Likin* Stations.

In order to understand the financial condition of China we must first form some idea of the currency in which the revenue is collected, the sources from which the taxes are derived, and the fiscal devices employed for transferring them from the private purse of the taxpayer to the public Exchequer of the Chinese Republic.

Currency

The monetary unit in China is the Chinese ounce or tael [1] of silver. The weight is not uniform; it varies from one commercial centre to another. The silver also is of varying purity, rated according to a theoretic standard which differs with the locality. It circulates in the form of ingots, or 'shoes', as they are called, of sycee [2] of different shapes and sizes up to fifty or sixty taels in weight. A tael weighs about $1\frac{1}{3}$ oz. troy. The purity of sycee is rated in thousandths of pure silver. Thus the Haikwan or Customs tael in which dues are paid is 992·3 parts of 1,000 fine; the K'u-p'ing or Government Treasury tael 987 fine. The Shanghai Ts'ao-p'ing or 'Tribute' tael (used in commercial transactions) contains $518\frac{1}{4}$ grains of silver 1,000 fine.

The only Chinese coin proper is the cash,[3] originally 1/1000 of a tael of silver. It is about the size of an English halfpenny, but thinner. It is provided with a square hole in the centre

[1] From the Malayan *tahil*, Indian *tola*, a weight equal to 180 grains troy.

[2] Cantonese *Sai sze*, fine silk, in allusion to the fine threads into which pure silver can be drawn.

[3] Sanskrit *Kärsha*, equal to 1/400 of a tola, through the Portuguese *caixa*.

by which the cash are strung into rolls of 100, of which 10 rolls go to the *tiao* or string of cash. A full tiao is, therefore, 1,000 cash.

Paper money in the form of tiao notes are commonly met with, but the issue being left to private banks the circulation is strictly circumscribed as to area. The tiao notes of one town are not accepted in another or neighbouring town.

It will be seen that the currency of China is lacking in the marks of portability, uniformity, divisibility, and cognizibility, which are generally recognized as essential to any system of currency intended to fulfil the double functions of a medium of exchange and a standard of value. The need of a more accurate and convenient circulating medium was increasingly felt as transactions with foreigners multiplied. About the middle of last century the Mexican dollar was introduced and, as an adjunct to the ordinary Chinese currency, came into general use, first in exchanges between foreigners themselves and subsequently in financing the crops with which foreigners were chiefly concerned, tea, silk, and cotton. The advantages to trade of a uniform coin like the Mexican dollar, its convenience and economy, were obvious enough, but the Chinese were not disposed to credit the foreigners with philanthropic motives in introducing it. If there was any profit to be made the Chinese thought they might as well secure it for themselves. Mints were established at the provincial capitals of Kwangtung, Kiangnan, Hupeh, and Anhwei (also at Tientsin) for the coinage of Chinese dollars resembling Mexicans in appearance. At first the issues were considerable, but the coins, having only behind them the guarantee of the province in which they were issued, were never freely accepted outside of it. The mints accordingly fell back upon the more lucrative business of striking subsidiary coins [1] in ten and twenty cent pieces of 800 fine, as against 900 for the dollar. A profit of 10 per cent. was more than the mints could resist. Coins were turned out as

[1] A recent estimate, quoted by Dr. Vissering, puts the silver subsidiary coins in circulation at 1,500,000,000.

fast as they could be issued, with the result that the redundancy of the subsidiary coinage, unless sternly checked by the Central Government, is likely to give rise, is indeed already giving rise, to a dislocation of prices which may involve serious social results. It is said that the Republic is alive to this danger and that, but for the difficulty of getting rid of vested interests, they would abolish provincial issues altogether and substitute a national currency for the whole Empire, bearing the stamp of the Republic and the effigy of its first President, Yüan Shih-k'ai. Such a coin has already been struck and is in circulation. In appearance it leaves little to be desired, and if only the standard of 416 grs. weight and 900 fine is strictly maintained, the Yuan dollar might well be hailed as the first step in Chinese currency reform.[1] The dollar has been adopted by the Chinese Government as the money of account in presenting their annual budget. Railway fares are paid and the accounts of the companies kept in dollars. Sir Richard Dane determined from the first to collect his Salt Gabelle in dollars, and he has succeeded beyond all expectation. The gradual substitution of the dollar for the tael as the monetary unit of China seems probable. The advantages which would accrue to China from the adoption of a uniform currency are incalculable, and by his firmness and courage in accelerating the movement Sir Richard Dane has rendered a service to China of even deeper significance than his reform of the Salt Gabelle.

The native banking system has been developed in accordance with the genius of the people. Its functions, which upon the whole appear to be adequately performed, are confined to the internal exchanges of the country. It is possible for a traveller to obtain a credit from a native banker on his various correspondents which will enable him to pay his way from one end of China to the other ; by no possibility, when

[1] A recent analysis of a number of Yuan dollars at a foreign mint shows a deviation from the standard, after allowing for the usual remedy, which does not make an auspicious beginning. The average was 414½ weight, 889½ fineness as compared with the 416 grains 900 fine of the British dollar and Japanese yen.

the journey is ended, can the traveller obtain from a native bank a draft for the balance of his account upon any other country whatsoever. For such accommodation he must have recourse to the foreign banks.[1]

The official status under the Republic of the Bank of China (Paid-up Capital Tls. 5,000,000) and the Chiaotung Bank or Bank of Communications (Capital Dollars 60,000,000), both Government institutions, may lead to an improvement in the control of the currency ; it may eventually assist in the regulation of the foreign exchanges, should China ever adopt, as has been proposed, a modified form of the gold standard, such as prevails in India and the Straits Settlements, or the *étalon boiteux* favoured by Dr. Vissering, which has been worked with such success in Java. But that day is far off, if only on account of the impracticability of China's acquiring under present conditions the reserve of gold required to make any such scheme workable. In spite of the defection of the surrounding countries, Japan, Java, the Philippines, Siam, the Straits Settlements, and India, China is likely to prove loyal for a long time to come to the silver standard of value with all its concomitant disadvantages of uncertain and fluctuating exchange. Between gold and silver standard countries there can be no parity to which the exchanges are always tending. The only limit set to the variations in value of the silver tael as expressed in terms of gold is the price of bar silver, above which, after adding shipping charges, it cannot rise, and below which, after deducting shipping charges, it cannot fall. In China, as Dr. Vissering observes, the silver currency is an article of barter, of which neither the weight nor the quality is anywhere fixed.

It would be difficult to exaggerate the evils daily inflicted upon China by an inchoate and irregular currency, the wastefulness, the chicanery, the oppression, the injustice, the loss of happiness, the temper to which it gives rise. One does not know where to turn to find a parallel to such a state

[1] There are ten foreign banks established in China with an aggregate capital and reserve of over £32,000,000.

of things unless to England at the close of the seventeenth century. There is more than one passage in the famous twenty-first chapter of Macaulay's *History* which recalls the China of to-day. 'It may well be doubted', Macaulay says, 'whether all the misery inflicted on the English nation in a quarter of a century by bad kings, bad ministers, bad parliaments, and bad judges, was equal to the misery caused in a single year by bad crowns and bad shillings. . . . When the great instrument of exchange became thoroughly deranged, all trade, all industry was smitten as with a palsy. The evil was felt daily and hourly in almost every place and by every class, in the dairy and on the threshing-floor, by the anvil and by the loom, on the billows of the ocean, and in the depths of the mine. Nothing could be purchased without a dispute. Over any counter there was wrangling from morning to night. The workman and his employer had a quarrel as regularly as the Saturday came round. On a fair day or a market day the clamours, the reproaches, the taunts, the curses were incessant; and it was well if no booth was overturned and no head broken. The simple and the careless were pillaged without mercy by extortioners whose demands grew even more rapidly than the money shrank!' And so on. Allowing for Macaulay's rhetoric, this is no untrue picture of what is going on in China to-day. There is no more vital reform, none more urgent, none more salutary and far-reaching in result, none, but for the vested interests it encounters, so simple to effect as the reform of the currency of China. It would, we believe, do more to establish the peace and prosperity of that country than any other reform whatsoever.

Taxation

The basis of taxation in China is the claim of the Emperor, as lord of the soil, to a share in its produce. The rental was fixed by the permanent settlement of 1712,[1] upon which to

[1] Cf. the Bengal permanent settlement of 1793, when the demand of the State was fixed and made for ever unalterable by Lord Cornwallis.

this day, in theory at least, the land-tax is assessed for the whole of China. In practice surcharges are added which on the most moderate estimate treble the cost to the tax-payer without adding to the revenue of the Central Government. The tax is, in fact, farmed, only the surplus being remitted to Peking after the expenses of provincial administration, in the widest sense of that word, have been deducted as first charge. Mr. Jamieson, writing in 1905, estimated the total land-tax leviable at Taels 375,000,000. The reported collection—that is, the surplus remitted to Peking—was at that time only Taels 26,000,000, while the actual collection, writes Mr. Morse, was almost certainly not less than Taels 102,000,000, and the possible collection, as estimated by such a high authority as Sir Robert Hart, was Taels 400,000,000.[1]

Likin [2] is a tax on merchandise in transit which was first introduced in 1852. The tax contravenes the spirit, if not the letter, of the Treaty of Nanking of 1842 by which the Treaty-ports were opened to foreign trade. It may be said, however, to have been conditionally condoned by its incorporation in the security for the Hukuang Railway Loan of 1911, pending its abolition as provided for in the Mackay Treaty of 1902. It is unfortunate that foreigners should have acquiesced, even temporarily, in a tax which is at once expensive in collection, vexatious in operation, uncertain in incidence, and unfruitful in results. Its yield is now merged with other taxes, but in the Budget of 1911 it appeared to contribute Taels 44,000,000 to the National Exchequer.

It is unnecessary to deal in detail with the remaining miscellaneous taxes which in the same vague and desultory way contribute a reluctant and grudging surplus to the central Exchequer of the Republic. These form part of a fiscal system which may be justly condemned in so far as the taxes it imposes, in being neither equal, nor certain, nor economical, nor progressively productive, offend against four out of the

[1] *The Trade and Administration of the Chinese Empire*, by H. B. Morse.
[2] Li, a hundredth part; Kin, money, meaning a percentage.

five canons of taxation originally laid down by Adam Smith, and now generally accepted by all civilized nations.

In striking contrast to the fiscal methods of native administration, the two great departments of the Revenue which have been placed under foreign control, the Maritime Customs and the Salt Gabelle, stand out as an object-lesson of what may be accomplished even in China by proper accounting. The transfer of the Maritime Customs to foreign control followed as a consequence of the capture of the native city of Shanghai by the T'ai-p'ing rebels in 1853. The native Custom House being closed, the foreign merchants who, to their honour be it said, showed no desire to evade their obligations, deposited with their respective consuls bonds for the duties for which they had become liable. The obvious inconvenience of this plan led to its being superseded later by an Agreement with the Chinese authorities for the establishment of a Customs Board, from which the present Maritime Customs service was evolved under Sir Robert Hart, who was appointed Inspector-General in 1861. From Taels 8,000,000, or 11,000,000 dollars, in 1885, the revenue collected for the Central Government has increased to $50,000,000 in 1914.

In 1913 the Republic being hard put to it to find the increased revenue required to meet the revolutionary claims, the Salt Gabelle was placed under the control of Sir Richard Dane. Under his administration the revenue from salt, which in 1905 produced only $17,000,000, contributed last year $70,000,000 to the Exchequer of the Republic.

Revenue

Until within quite recent years it has never been the practice of the Chinese Government to publish an annual budget statement. Various attempts have been made from time to time by foreigners to supply the deficiency, but the results obtained are admittedly little better than guesswork. In 1901 Sir Robert Hart, than whom none had better opportunities of forming an opinion, estimated the total annual revenue of China at Taels 90,400,000, made up as follows :

SIR ROBERT HART'S ESTIMATE FOR THE YEAR 1901

	Taels.
Land-tax in silver	26,500,000
Land-tax in grain	3,100,000
Salt Tax	13,500,000
Imperial Maritime Customs	23,800,000
Likin	16,000,000
Native Customs	2,700,000
Native opium	2,200,000
Provincial Income	2,600,000
	90,400,000

Four years later, in 1905, Mr. E. H. Parker arrived at a total of Taels 102,924,000. We give his figures as revised by Mr. H. B. Morse, the former head of the statistical department of the Chinese Customs.

1905

MR. E. H. PARKER'S ESTIMATE AS REVISED BY MR. H. B. MORSE

	Taels.
Land-tax in money	25,887,000
Tribute whether commuted or not	7,420,000
Native Customs	4,160,000
Salt Gabelle	12,600,000
Miscellaneous taxes, old and new	3,856,000
Foreign Customs	35,111,000
Likin on general merchandise and native opium	13,890,000
Total	102,924,000

It should be noted that all foreign estimates of the budget of China are by the nature of the case limited to the data supplied by the *Peking Gazette*, namely the amounts which actually reach Peking, and take no account of the amounts retained by the provinces. The importance of this proviso will be seen when we come to consider the budgets framed by the Chinese themselves. Mr. Parker's budget of Taels 102,924,000, for example, should, if we follow Mr. Morse's estimate of the amounts retained for provincial and local administration, be increased to Taels 284,154,000, or Dollars 394,658,333, if it is to be taken as a measure of the total annual revenue of the State. How does this estimate compare with the actual Chinese budget of to-day ?

With the advent of the Chinese Republic in 1912 the

attention of the Government was naturally focussed on finance. An annual budget became a necessity of the new official régime, and no less than six were presented in the course of the first two years. The following is the revised budget of the Republic of China for the financial year ending June 30, 1916 :

ORDINARY REVENUE

		Income.
1. Land-tax	$95,972,818	
2. Customs Revenue	71,320,970	
3. Salt Revenue	84,771,365	
4. Tax on Commodities	40,271,368	
5. Direct and Miscellaneous Tax	32,341,704	
6. Direct and Miscellaneous Subs.	14,067,574	
7. Income of Government Investment	2,621,261	
8. Miscellaneous Income of Provinces	6,927,694	
9. Income of Central Administrations	1,635,464	
10. Income directly received by Central Government	76,306,927	$426,237,145

EXTRAORDINARY REVENUE

1. Land-tax	$1,580,695	
2. Customs Revenue	847,359	
3. Tax on Commodities	18,766	
4. Direct and Miscellaneous	4,496,333	
5. Income of Govt. Investment	16,703	
6. Miscellaneous Inc. of Provinces	338,253	
7. Income of Cent. Administrations	1,359,698	
8. Income directly received by Government	17,051,808	
9. National Loan	20,000,000	
		45,709,615
		$471,946,760

ORDINARY EXPENDITURE

		Expenditure.
1. Waichiaopu [1]	$3,276,677	
2. Ministry of Interior	49,653,982	
3. Ministry of Finance	53,531,625	
4. Ministry of Army	135,813,986	
5. Ministry of Navy	17,101,779	
6. Ministry of Justice	7,665,772	
7. Ministry of Education	12,611,583	
8. Ministry of Agriculture and Commerce	3,762,244	
9. Ministry of Communications	1,577,408	
10. Bureau of Mongolia and Tibet	947,230	
		$285,942,286

[1] Ministry of Foreign Affairs.

	Expenditure.
Brought forward	$285,942,286

EXTRAORDINARY EXPENDITURE

1. Waichiaopu [1]	$826,141	
2. Ministry of Interior	2,105,864	
3. Ministry of Finance	175,302,789	
4. Ministry of Army	6,438,727	
5. Ministry of Navy	102,758	
6. Ministry of Justice	45,572	
7. Ministry of Education	225,724	
8. Ministry of Agriculture and Commerce .	376,792	
9. Ministry of Communications . . .	112,783	
10. Bureau of Mongolia and Tibet . .	40,000	
		185,577,150
		$471,519,436

Under the Republic the budgets are based upon the total annual collection, and not, as formerly, upon the amounts contributed by the provinces to Peking. But even allowing for the increase from this cause, the discrepancy between former estimates by foreigners of the Revenue of China and the figures of the official budgets will not have escaped observation, and requires to be explained. It will not do, after the manner of a recent critic, to dismiss the official figures with the remark that they must be considered as more or less fanciful, as an estimate of what it might be possible to collect rather than of what is actually collected. That would be to fall into the common fallacy in logic of dragging in the far-fetched explanation when an adequate one may be found nearer at hand. There is reason to believe that the provincial contributions as published in the *Peking Gazette*, which, as has already been explained, formed the basis of the foreign estimates, were regularly and deliberately understated. We have also to consider that the Republican Government has exhibited a fiscal activity in excess of their Imperial predecessors, which has helped to stanch at least some of the leakage at the source. It is probable, also, that through the agency of the stamp duties sources of revenue have been detected which formerly escaped scot-free. Finally,

[1] Ministry of Foreign Affairs.

it is certain that under the Republic there has been a marked advance both in security and in revenue. The discrepancy, in fact, seems susceptible of a rational explanation, and while the figures may not be completely realized, the official budget of China need not be rejected as illusory and untrustworthy.

The expenditure side of the account balances to within 500 dollars of the revenue, but how far this oriental nicety corresponds with the reality we have no means of judging. But upon the whole it would seem that this early budget may be taken as an honest first attempt to unravel the tangled skein of Chinese finance, the value of which may be expected to increase as time goes on, and as the figures of each successive budget can be tested by those of its forerunners.

Foreign Debt

At her first entry into the comity of nations China showed a reluctance to contract a foreign debt, which was of happy augury for her future credit. It would have been well for China if that policy had been maintained. Unfortunately, the ill-starred war with Japan in 1894 brought in its train the payment of an indemnity amounting to £32,000,000, which provided the occasion, as the tangible security which had been created by the foreign-controlled Maritime Customs provided the means, for having recourse to a foreign loan. The foreign loan of 1894 proved to be the first of a long series which culminated in the Reorganization Loan of 1913 for £25,000,000.

The capital sum of China's Foreign Debt outstanding on the 31st December, 1915, was, in round figures, £180,000,000. This total includes :

1. The indemnity exacted by the Powers after the anti-Foreign outbreak in 1900.

2. Unproductive loans, viz. Chinese Government borrowings for indemnities and administrative purposes by loans publicly issued in Foreign markets.

3. Productive loans, viz. loans for railway construction similarly issued.

The total may be roughly stated under these headings as follows :

Boxer Indemnity	£64,000,000
Unproductive Loans	68,000,000
Productive Loans	36,000,000
	£168,000,000

In addition to this known 'Foreign Debt' the Chinese Government has of recent years raised money abroad by the sale, privately, of Treasury Bills estimated as amounting to £12,000,000.

Taking this estimate of £12,000,000 we get a total Foreign Debt of £180,000,000, of which only the £36,000,000 spent on railways [1] produces any return. The remainder, £144,000,000 in all, has produced nothing at all. The country has derived no benefit from it, but much harm. It has served no other end than to confer upon others the power to levy a tribute on the country of China, to wring from the peasant, who was not consulted in the matter and would not have consented if he had been, or perhaps even have understood what all the dispute was about, a share of the produce of his unresting labour.

General Conclusions

The general impression left by a survey of the fiscal system of China is that the methods adopted are in the highest degree wasteful, inept, and uncertain. It would be rash, however, to assume that because the people are badly taxed, therefore they are overtaxed. Indeed a comparison with India, where the general conditions bear the closest available analogy to those of China, points to an opposite conclusion.

	India.	*China.*
Population	244,000,000	400,000,000
Area of square miles	1,800,000	1,900,000
Taxation exclusive of Land-tax [2] . .	£27,000,000	£37,000,000
Burden of taxation per head . . .	2*s.* 2½*d.*	1*s.* 10¼*d.*
National Debt	£274,000,000	£180,000,000
Burden of debt per head	22*s.* 6*d.*	9*s.*

[1] There are 6,300 miles of railways open in China as compared with 35,000 miles in India.

[2] The tax on land is not properly a tax, but a rent paid by the occupier to the State as sovereign lord of the soil.

The population and taxable area of China are larger than in India. The standard of comfort in the former is higher. The Chinese peasant is better clad, better nourished, and at least as well housed as the Indian ryot. There is more physical energy in China than in India, greater ability to pay. And yet the burden of taxation is lighter, namely 1*s.* 10¼*d.* per head in China as compared with 2*s.* 2½*d.* in India. The burden of debt is also less in China—9*s.* per head, as compared with 22*s.* 6*d.* in India—but here the comparison is vitiated by the excessive proportion in China of unproductive debt. The true test of national debt is not its size but its quality, what it stands for. No less than £262,000,000 of the total Indian debt of £274,000,000 represents investment in Indian railways and irrigation works, conferring the greatest value upon the country and returning good interest to the bond-holder. Of China's £180,000,000 debt, no less a sum than £144,000,000, or nearly 80 per cent., makes no return at all and stands for nothing.

There are few public debts which would emerge unscathed from a strict investigation of their origin, and it is not necessary to be too censorious in the case of China. What is done is done, and if we deplore the existence of this mass of unproductive debt there is no need to exaggerate its consequences. It might have been worse. The burden of debt is still light. The revenues hypothecated as security are already more than sufficient to provide for the service, that is the payment of interest and principal, of all existing loans. China is ill provided with the means of communication, and there is much work to be done in linking up the existing lines of railway on which construction has been temporarily suspended by the European War. For these and other public works loans will be required for which the mineral and other undeveloped resources of the country, if opened up, should furnish ample security. More important than these material things, more important even than their unexhausted taxable capacity, is the security afforded by the character of the Chinese nation. In the first century of the Christian era a Chinaman's word

was known to be as good as his bond. It is so to-day. Dynasties may rise and fall, a monarchy may give place to a republic, but we have yet to hear the word repudiation in connexion with China.

The Chinese Customs and Likin Stations

There are in China three main establishments for the levying of duties on trade—the *Haikuan* (Maritime Customs) or *Hsin-kuan* (New Customs), the *Chiu-kuan* (Old Customs, known as the Native Customs), and the *Li-chin-chü* (Likin offices)—all of which are administered separately.

(1) The Haikuan or Maritime Customs are under a system of foreign control perfected by the late Sir Robert Hart. The Nanking Treaty of 1842 provided for a fair and reasonable tariff of export and import duties to be levied at the five treaty-ports. Thus, when Shanghai was opened to foreign trade in 1843 a Custom House was established there. But when the native city was taken by the T'ai-p'ing rebels in 1853 no duties were collected for a time until the British and American consuls agreed to collect the 5 per cent. export and import dues from their own nationals. This led to the establishment of a Custom House in 1854 in the European quarter of Shanghai under foreign control, the British, American, and French Consuls each nominating an inspector. The British inspector, Mr. T. F. Wade (afterwards Sir Thomas Wade), alone of the three could speak Chinese, and the supreme control consequently devolved on him. He was succeeded by Mr. H. N. Lay ; and the latter, after the Treaty of Tientsin in 1858, was appointed the first Inspector-General of the Customs Service, which in due course was extended to the other open ports. Mr. Lay resigned later, and in 1863 Mr. Robert Hart was appointed Inspector-General of the Imperial Maritime Customs. The head offices were transferred from Shanghai to Peking, and a complete reorganization of the service was effected. Mr. Hart, who was knighted in 1882, retained this post until his death in 1911,

though he actually left Peking in 1908. His successor is Mr. F. A. Aglen.

In 1898 the Chinese Government, when contracting a loan secured on the Customs receipts, bound themselves not to alter the administration of the Imperial Maritime Customs until the loan was repaid, and the principle has been accepted that a British subject shall be the head of the Customs service so long as British trade preponderates in China.

In 1906 the Maritime Customs were transferred from the Foreign Office and placed under the control of the *Shui-wu-chü* or Revenue Council.

In 1913 the service employed 7,411 persons, the principal posts being held by 1,375 foreigners (of twenty nationalities), of whom rather more than half were British.

Besides collecting duties on imports and exports the Maritime Customs collect (1) duties on the coasting trade in foreign-built ships, whether Chinese or foreign owned, (2) tonnage dues on shipping, (3) transit duties exempting foreign imports from further taxation on removal inland, and (4) likin on foreign opium. They are also responsible for the buoys, light-vessels, beacons, and lighthouses on the coast and some inland waterways, and at Shanghai they maintain a force of river police. All moneys collected by the Customs are paid to an official Customs Bank, attached to each office, which is under the control of a Chinese superintendent.

The export and import duty is 5 per cent. *ad valorem*, except on a few articles, of which some are charged a higher rate, and some are duty-free. Fire-arms, gunpowder, and salt are prohibited articles.

Transit duties were fixed by the Tientsin Treaty at one-half of the import duty in the case of dutiable articles, and $2\frac{1}{2}$ per cent. *ad valorem* in the case of duty-free articles.

Coastwise trade duties are levied at the same rate as transit duties on native articles imported through a China port after having been shipped from another China port. The articles have to pay at the latter port export duties at the foreign export rate.

(2) The Chiu-kuan, or Native Customs, date back to remote times, and exist to-day alongside the Maritime Customs at the treaty-ports, where they deal with the native junk traffic, and at all important trade stations on the coast and inland. Since 1901 these Native Customs within 15 miles of a treaty-port have been placed under the supervision of the foreign Commissioner of Customs at that port. Under the late dynasty the native customs service was controlled by a central authority at Peking. The exactions which are made under numerous headings are very heavy, and the old customs duties combined with the likin often amount to several times the original value of the goods.

(3) The Li-chin-chü. The likin is a tax imposed on goods in transit. It is said to have been levied originally to meet the additional expenditure caused by the T'ai-p'ing Rebellion, but it was extended in 1861 throughout the country. Likin stations or barriers exist at all large towns and on the main routes of commerce by land and water. The official tariff of rates is frequently ignored in favour of bargaining between the officials and traders. The tax is repeated at different likin stations when the goods travel long distances. Guilds and regular traders meet likin charges by the payment of lump sums. The tax collected is generally 3 per cent. at the departure station and 2 per cent. at each inspection station, but the amount collected within a province is usually arranged so as not to exceed 10 per cent. Foreign imports and exports which have paid the transit duties are exempt from the likin toll.

Besides the above-mentioned taxes there is the Lo-ti-shui, a kind of *octroi*, levied at the gates of cities. Thus a 3 per cent. *ad valorem* duty is levied on all goods belonging to foreigners at the Chung-wên-mên gate of Peking. Rates, however, are not uniform, and goods belonging to foreign merchants are usually taxed lower than Chinese merchandise.

The *China Year-book* gives the revenues from the Native Customs for 1912 as about £433,386, and from the likin for 1912 as about £3,200,000 (estimated). The revenue from

these sources fluctuated widely, while that from the Maritime Customs shows a steady increase. The latter was 30,007,044 Haikuan taels in 1902, and 39,950,612 in 1912. The value of the Haikuan tael, in which the Maritime Customs returns are always reckoned, is subject to constant variation, but the above figures represented about £3,950,000 and £5,992,600 respectively.

CHAPTER XIV

MONEY, WEIGHTS, AND MEASURES

Money

The Chinese unit of currency is the tael (*liang*), which is not a coin, but a weight representing a Chinese ounce of silver of a varying standard of purity. The tael is divided as follows :

1 tael (*liang*)	= 10 mace or *ch'ien*.
1 mace (*ch'ien*)	= 10 candareens or *fên*.
1 candareen (*fên*)	= 10 cash or *li*.

Hence a tael is nominally 1,000 cash; but in reality the rate of exchange varies widely, and the tael may be worth as little as 800 cash or as much as 1,800.

There are various kinds of taels, differing in value according to weight and quality. Of these the Haikuan tael is the unit in which the duties levied by the Maritime Customs are calculated. Its exchange value is always varying, and the exchange rates of the Haikuan tael in foreign currencies are settled each month by the Customs authorities. In 1913 it varied from 3*s*. $2\frac{5}{8}$*d*. in January to 2*s*. $10\frac{1}{2}$*d*. in December.

The K'u-p'ing tael is the Treasury unit, in which all Government taxes and dues other than Maritime Customs are calculated. In theory its value is uniform throughout the Empire.

The Ts'ao-p'ing tael is in general use in Shanghai, and foreign exchange rates are quoted in it by banks.

The Canton tael is used for weighing bar silver in Hongkong, Shanghai, and Canton.

In converting one tael into another three elements have to be considered, weight, fineness of the silver, and premium,

which is regulated by convention or old custom. As a result we find that—

100 Haikuan taels = 111·40 Shanghai taels or 105·215 Tientsin taels.

100 K'u-p'ing taels = 109·60 Shanghai taels.
100 Haikuan taels = 101·642 K'u-p'ing taels.

The currency in actual circulation consists of *yin-liang* (silver lumps or ingots, such as 'shoe-silver'), *yüan-yin* (silver dollars), *hsiao-yang-ch'ien* (small silver pieces), *t'ung-tzŭ* (copper coins), *t'ung-ch'ien* (copper 'cash'), *liang* notes, dollar notes, and *ch'ien* notes. Foreign money consists of silver dollars, small silver pieces, *liang* notes, and dollar notes. The one coin which has a general circulation throughout China is the copper cash (*t'ung-ch'ien*). The rest have their face value only in the provinces in which they are minted, and circulate in other provinces at varying rates of exchange. In some cases the rates of exchange are affected by capricious reasons, as, for instance, the temporary popularity of a certain kind of dollar in a certain district irrespective of the purity of the coin. Some kinds of foreign money circulate freely in the treaty-ports. On the other hand, some of the notes issued by Chinese banks and exchange houses are only valid in the place of issue. So that it behoves the traveller to look ahead, and when moving to a new place to provide himself with the currency of the new locality.

To return to the individual forms of currency, the *yin-liang* or silver lumps or ingots, known also as *yin-tzŭ* or *yin-ting*, are of various types, viz. *yüan-pao*, generally of 50 taels, known as 'shoe-money' from the shape of the lump; *hsiao-yüan-pao*, generally 10 taels in weight; and *hsiao-ting*, generally 5 taels and hemispherical in form. These silver lumps are used in the larger transactions; and there is much variation in their exchange value. Their quality is determined by *Kung-ku-chü* (Public Assay Houses) or *Yin-lu* (Silver Houses). The former are found in all large towns. They test the weight and quality of the silver, and inscribe their verdict on the face

of the lump. The *Yin-lu* (or *Lu-fang*) melt the silver bullion and cast it into silver lumps, inscribing the quality and quantity of the metal on the lump, as well as the name of the house and date of casting. Both types of assay houses accept responsibility for the lumps which bear their signatures. Another name for the silver lumps is *sycee*.

The silver dollar, popularly known as *ta-yang-ch'ien*, and the smaller silver coins as *hsiao-yang-ch'ien*, are issued at the provincial mints. Their value fluctuates with the rate of exchange, and the dollars of one province are at a discount in another. The dollar is the value of 100 cents, and the smaller silver coins include 50-cent, 20-cent, 10-cent, and 5-cent pieces.

Besides the native dollars there are numerous other dollars in circulation, such as the old Spanish dollar, which is now scarce and highly prized in certain districts; the Mexican dollar (which is in general use in Shanghai and the neighbourhood); the Hongkong and Straits dollars. All of them are subject to fluctuations in rates of exchange; and, except when a certain type of dollar happens to be in fashion, they will as a rule be at a discount with regard to the local Chinese coin.

The *t'ung-tzŭ*, or copper coins, are of two kinds, two-cent (= about 20 cash) and one-cent pieces: they contain 95 per cent. of pure copper and 5 per cent. zinc, but like the silver coins they are only honoured at their face value in the province in which they were minted.

The *t'ung-ch-ien*, or copper cash (nominally containing 50 per cent. copper), are small flat disks with a square hole in the middle. They are the most ancient coin of China, and the only one which is universally recognized throughout the Empire; but owing to their varying quality they are subject to fluctuations in the exchange. They include *hsiao-ch'ien*, a poor type of cash, and smaller than the *chih-ch'ien* or Government cash. The latter are of two kinds, the larger cash worth 20 *wên*[1] and the smaller worth 10 *wên*. 50 of the larger and

[1] *Wên* here is a unit of calculation and not an actual coin. The word is also used as a numerative of coins, e. g. *i wên ch'ien* = one cash.

100 of the smaller strung together are known as 1 *tiao*, worth 1,000 *wên*. The exchange quotations of these cash are fixed by the Association of Exchange Houses (*Ch'ien-yeh Kung-so*), the tael being sometimes valued at 1,200 cash and sometimes at as much as 1,800.

The paper money issued by Chinese exchange houses and banks consists of tael notes (*yin-p'iao*), dollar notes (*yang-ch'ien-p'iao*), and copper cash notes (*ch'ien-p'iao*). The dollar notes are for 1, 5, and 10 dollars, and the cash notes for 1 *tiao* up to 10 *tiao*. These notes are only negotiable at face value in the city in which they are issued.

The foreign coins current in China consist of old Spanish dollars, Hongkong and Mexican dollars, the subsidiary silver pieces issued at the Hongkong mint, and the Japanese *yen*. The foreign notes (tael, dollar, and *ch'ien*) are those issued by the Hongkong and Shanghai Banking Corporation, Chartered Bank of India Australia and China, Yokohama Specie Bank, Bank of Taiwan, Russo-Asiatic Bank, Banque de l'Indo-Chine, Deutsch-Asiatische Bank, and International Banking Corporation. The coins circulate freely in the treaty ports and larger cities of China, but the notes only in the city of issue. See Chapter XIII.

Weights and Measures

The weights and measures of China are, if possible, more diverse and confusing than the currency. Not only are there many different scales in use for weighing, but the measures differ with different localities; and the only thing constant is their denominations.

Linear Measures

10 fên	= 1 ts'un (inch).
10 ts'un	= 1 ch'ih (foot).
5 ch'ih	= 1 pu.
10 ch'ih	= 1 chang.
180 chang	= 1 li.

It is estimated that there are several hundred kinds of *ch'ih* in use in China, the length varying from 8·6 to 27·8 inches.

The different trades, for instance, have different standard lengths, and these standards vary in different places. Take the tailors' and carpenters' measures at five important cities :

	Tailors' *ch'ih*.	Carpenters' *ch'ih*.
Peking	13·45–13·58 English inches	12·68 English inches
Tientsin	13·14 ,,	12·35 ,,
Hankow	13·90 ,,	13·80 ,,
Shanghai	13·85–14·05 ,,	11·14 ,,
Canton	14·80 ,,	12·70 ,,

To get over the difficulty caused by these discrepancies, Great Britain, France, and Germany made an agreement with the Chinese Government that for purposes of foreign trade a fixed standard should be recognized in which one *ch'ih* = 14·1 English inches, 358 French millimetres, and 13·7 German Zoll.

The *li*, which is theoretically 2,115 ft. or $\frac{2}{5}$ of a mile, is usually reckoned as a third of a mile.

Surface Measures

25 square ch'ih	= 1 pu or kung.
240 pu	= 1 mou.
100 mou	= 1 ch'ing.

The *mou* is regarded at Shanghai by custom as one-sixth of an English acre, or 806·65 square yards.

Measures of Capacity

10 shao	= 1 ko.
10 ko	= 1 shêng.
10 shêng	= 1 tou.
5 tou	= 1 hu.
10 tou	= 1 shih.

Measures of capacity are seldom used except for rice and grain. There is no uniformity in actual measuring owing to

variations in the capacity of the measures used. The *tou* for tribute purposes = 10·31 litres : in ordinary use it varies from 1·13 to 2·5 English gallons.

Measures of Weight

10 li	= 1 fên.
10 fên	= 1 ch'ien or mace.
10 ch'ien	= 1 liang or tael.
16 liang	= 1 chin or catty.
100 chin	= 1 tan or picul.

For purposes of foreign trade these weights are fixed as follows :

1 liang = 583·3 grs. = $1\frac{1}{3}$ oz. av. = 37·783 grammes.
1 chin = $1\frac{1}{3}$ lb. or 604·53 grammes.
1 tan = $133\frac{1}{3}$ lb. or 60·453 kilos.

In native trade the *chin* varies from 12 to 42·5 ounces, and the number of *chin* in a *tan* varies from 90 to 280.

A note in the United States Commerce Reports, April 22, 1915, gives further information. A new law has been promulgated to secure uniformity in weights and measures. It provides for the inspection of weights and measures used in China, imposing fines for the use of untested and fraudulent measures ; and sanctions the establishment of a special plant for the manufacture of weights and measures in order to secure uniformity. It is based on a double system, one being the standard metric unit, the other based on the *builder's foot* for length and on the *Kuping tael* (liang) for weight.

The units of length, area, capacity, and weight with their metric and American equivalents are :

Length. 1 ch'ih = 0·32 metre = 1·049867 ft.

Surface. 1 mou (6,000 sq. ch'ih) = 0·06144 hectare = 0·15182 acre.

Capacity. 1 shêng = 10·354 litres = 9·112 liquid quarts or 2·278 gallons.

Weight. 1 liang = 37·301 grammes = 1·31561 oz. av.

The term *li* is used to express (*a*) 0·001 ch'ih (also 1,800 ch'ih), (*b*) 0·01 mou, and (*c*) 0·001 liang.

CHAPTER XV

RAILWAYS

RAILWAY construction in China has been a comparatively slow process. Every natural incentive has been present—teeming populations, vast quantities of produce and large tracts of easy country—but railways were far too modern for the old governing classes who feared loss of authority with the coming of new habits, and the masses were taught to regard them as injurious to the religious ideas which permeated the national life.

The Chino-Japanese War (1894–5) caused the first serious breach in the wall of prejudice against railways. A narrow-gauge line of 10 miles, between Shanghai and Woosung, had been built in 1876 and torn up two years later: in 1880 a track of 7 miles had been laid from the Kaiping coal-mines to the bank of a canal, and this had been expanded gradually and in spite of much opposition from 1887 to 1890 into a railway extending from Tientsin to Kuyeh; and some 60 miles were constructed in North Formosa between 1887 and 1893. But in 1896 the first important concession was made to the Russian Government to shorten the connexion with Vladivostok by a line across Manchuria (the Chinese Eastern Railway), and this was closely followed by concessions to Germany in Shantung, and to England in Kiangsu and Chihli. In 1896 only 370 miles were in operation; in 1906 this mileage had increased to 2,330; in 1911 it was 5,800; and at the end of 1914 it was 6,300.

The whole subject of Chinese railways is dealt with in detail in a separate volume, and for present purposes it will be sufficient to give a summary of the principal lines and projects in the following subdivisions:

I. Manchuria.

II. Railways north of Peking.
III. Railways north of the Yangtse.
IV. Railways south of the Yangtse.

I. MANCHURIA

(1) The Chinese Eastern Railway (Russian).
(2) The South Manchurian Railway (Japanese).

(1) The **Chinese Eastern Railway** was built under a concession granted to Russia by the Chinese Government in 1896 in order to continue the Trans-Siberian line across Manchuria to Vladivostok instead of following the circuitous route along the Amur. The main line was opened in 1901. The distance from Manchouli (Manchuria station) to Vladivostok is 1,069 miles. The line is single and the gauge 5 ft. There is one tunnel of 2 miles at mile 231 from Manchouli, and four shorter ones between Harbin and Vladivostok. The most important bridges are on the Sungari River, one at Harbin and the other at Laosiaokow. The line is guarded by Russian troops, the number being limited under the Treaty of Portsmouth to 15 per kilometre or about 25,000 in all.

Branch.—A light railway of 17 miles, metre gauge, connects **Tsitsihar** with the main line at Angangki station. It was opened in 1909.

Projects and extensions.—The following are contemplated by the Russian Government, and for some of them agreements have been completed :

(*a*) **Harbin–Blagoveschensk.** This will leave the main line at Tuitsingshan, 19 miles NW. of Harbin, and thence go N. to Aigun and Blagoveschensk on the Amur. Approximate length 328 miles.

(*b*) **Kirin–Hailin.** The latter is a small station on the main line 209 miles SE. of Harbin.

(*c*) **Tsitsihar–Taonanfu.** This project conflicts with a concession granted in 1910 to a Chinese company supported by British and American financiers.

(*d*) **Manchouli–Urga.** Urga is the chief town of North Mongolia and about 500 miles from Manchouli.

(2) The **South Manchurian Railway** is Japanese. The main line from the Sungari River to Mukden and Dairen was formerly part of the Chinese Eastern Railway and was ceded to Japan after the Russo-Japanese War. This line is 495 miles long. From Dairen to Sukiatunkai, 238 miles, it is double; north of this it is single, though some of the bridges have been built for a double track. The gauge is standard (4 ft. $8\frac{1}{2}$ in.). There are no tunnels, but a considerable number of important bridges.

Branches.—(*a*) **Mukden–Antung,** also known as the Ampō line. It was built as a light railway by the Japanese Government during the Russo-Japanese War and afterwards converted into a standard-gauge railway (1911). Connexion with the Korean system was established by a bridge over the Yalu River. It is 170 miles long, and runs mostly through mountainous country. There are 24 tunnels and numerous bridges.

(*b*) **Kwanchengtze (Changchun)–Kirin,** nominally Chinese, but the control is in Japanese hands. The line is of standard gauge, 79 miles long, and single. It was completed in 1912.

(*c*) **Nan-kuan-ling–Port Arthur (Lü-shun-k'ou),** 30 miles.

(*d*) **Tashihkiao–Newchwang (Yingkow),** 13 miles.

(*e*) **Fushun** colliery line, leaving the main line at Sukiatunkai—34 miles.

(*f*) **Yentai** colliery line, leaving the main line at Yentai—10 miles.

Projects and extensions.—The following are contemplated, and for (*b*) and (*d*) a loan has already been floated in Japan:

(*a*) **Kirin** to the **Tumen River** at Hoiryong or Hnchun; distance about 240 miles.

(*b*) **Kaiyüan** (on the main line 65 miles N. of Mukden) east to **Hailungfu,** 130 miles, and thence north to **Kirin,** 240 miles.

(*c*) **Szepingkai–Taonanfu,** via Liaoyüanchow (Chengchiatun), about 230 miles. Bridge across the Liao river.

(*d*) **Kwanchengtze (Changchun)** to **Taonanfu,** about 150 miles.

(*e*) **Taonanfu** to **Chengtehfu (Jehol),** about 470 miles.

II. RAILWAYS NORTH OF PEKING

(1) Peking–Mukden (King-Fêng or Ching-Fêng) Railway.
(2) Peking–Kalgan–Suiyüan (King-Chang and Chang-Sui) Railway.

(1) **Peking–Mukden Railway.** The line had its origin in a standard-gauge tramway connecting the Kaiping colliery with a canal some 7 miles distant, which was completed in 1881. A Chinese company, formed in 1886, extended this as a railway to Lutai, Tangku, and Tientsin in 1887, and northward to Kuyeh and the Linsi colliery in 1889 and 1890. A Chinese Government administration carried the railway to the Great Wall at Shanhaikwan for strategic reasons in 1894. After the Chino-Japanese War it was extended to Peking on the north-west and to Sinminfu on the north-east with the assistance of British capital raised in 1898. The section from Sinminfu to Mukden was purchased in 1907 from Japan, by whom it had been constructed during the Russo-Japanese campaign.

The main line runs from Peking SE. to Tientsin (mile 87) and Tangku (mile 114); thence NE. to Chinwangtao (mile 256), Chinchowfu (mile 376), Sinminfu (mile 486); and thence SE. to Mukden (mile 520). Except for short distances at Tientsin and Tangku the line is single. The gauge is standard; there are no tunnels; bridges are numerous, the principal being over the Lan Ho, the Ta-ling Ho, and the Liao Ho.

Branches.—(*a*) **Kowpangtze–Newchwang,** 57 miles, completed in 1900.

(*b*) **Lienshan–Hulutao** Harbour, 7½ miles.

(*c*) **Peking–Tungchow,** 15 miles.

Projects and extensions.—**Chinchowfu–Aigun.** In 1910 a preliminary agreement was concluded with a British and

American syndicate for the construction of a line about 750 miles long from Chinchowfu north to Taonanfu, and thence, crossing the Chinese Eastern Railway near Tsitsihar, to Aigun on the Amur. Objections were raised to this project by Russia and Japan.

(*b*) **Chinchowfu–Chengtehfu** (Jehol), about 240 miles. A survey has been made. The line would pass through Chaoyangfu and Pingchüan.

(*c*) **Chinchowfu–Dolon-nor.** This would follow the route of (*b*) as far as Chaoyangfu, and thence it would continue NW. through Chihfeng to Dolon-nor, on the fringe of Mongolia.

(*d*) **Peking–Chengtehfu** (Jehol). Construction was started in June 1916.

(2) The **Peking–Kalgan–Suiyüan Railway** is the first line financed, built and operated by Chinese without foreign assistance. It starts from Fengtai (Peking–Mukden line) and runs NW. through the Nankow pass to Kalgan (mile 124), thence SW. to Tatungfu (mile 238), and N. to Fengchen (mile 265). The rest of the line is under construction and should be finished in 1918. The total length will be about 344 miles. The track is single and of standard gauge. There are four tunnels in the Nankow section, and a very sharp gradient.

Branch.—**Hsi-chih-mên** (Peking) to **Mentowkow,** a colliery line of 16 miles.

Projects and extensions.—(*a*) A **Trans-Mongolian** line is contemplated to cross the Gobi from Suiyüan (Kweihwating) to Urga (about 800 miles from Kalgan) and Kiachta (about 1,000 miles), and thence to some point on the Trans-Siberian railway. Such a line would reduce the journey from Europe to Peking by two or three days.

(*b*) **Kalgan–Dolon-nor.** Approximate length 200 miles.

(*c*) **Suiyüan–Paotowchen,** about 110 miles, to connect the Peking–Kalgan Railway with the Yellow River.

III. RAILWAYS NORTH OF THE YANGTSE

(1) The Peking–Hankow (Ching-Han) Railway.
(2) The Tientsin–Pukow (Tsin-Pu or Ching-Pu) Railway.
(3) The Tsingtau–Tsinan (Kiao-Tsi or Shantung) Railway.
(4) The Lanchow-to-the-Sea (Lung-Hai or Lung-Tsin-Yü-Hai) Railway.
(5) The Hankow–Szechwan (Ch'uan-Han) Railway.
(6) The Pukow–Sinyangchow (Pu–Hsin) Railway.

(1) **The Peking–Hankow Railway.**—This line was constructed by a Belgian group, assisted by French capital. It was opened to traffic in 1905, redeemed and taken over by the Chinese Government in 1909. It is 753 miles long, and single-tracked, but the earthwork and bridges are wide enough to take a double track in two sections, viz. the first 90 miles from Peking and the last 20 before Hankow. Standard gauge. There are 2 tunnels and several bridges. The most important bridge, over the Yellow River, is 3,300 yards long.

At Peking connexion is made with the Peking–Mukden line.

Branches.—(*a*) **Chengtingfu–Taiyüanfu** (Cheng-Tai) **Railway.** This is a metre-gauge line of 151 miles, from Shih-chia-chuang (9 miles S. of Chengtingfu) westward to Taiyüanfu in Shansi. The country is mountainous and there are 19 tunnels. From Yütze on this line SW. to Pingyaohsien a railway was under construction, but as early as 1912 the work was abandoned.

(*b*) **Taokow–Tsinghwachen** (Tao-Ch'ing) **Railway.** A standard-gauge line of 96 miles, with branch lines of 7 miles, built by British capital. It was opened in 1903 and made over to the Chinese Government in 1905. It crosses the Peking–Hankow Railway at Sinsiang (mile 381 from Peking). Chiefly used for the transport of coal from the Peking Syndicate collieries.

(*c*) **Kaopeitien – Liangkochwang** (known as the Sin-Y or Hsi-ling branch) is a metre-gauge line of 26 miles to the Western Tombs of the Manchu dynasty.

(*d*) **Liangsiang–Toli,** a standard-gauge colliery line of 12 miles, branching westward at mile 19.

(*e*) **Liuliho–Chowkowtien,** a standard-gauge colliery line of 10 miles, branching westward at mile 31.

(*f*) **Kaoyihsien–Linchenghsien,** a standard-gauge colliery line of 10 miles, branching westward at mile 202.

(2) **The Tientsin–Pukow Railway** was constructed with British and German capital. The northern section from Tientsin to the Kiangsu border was undertaken by Germany; thence to the Yangtse by the British. The line was opened to through traffic in 1912. It is now under Chinese management.

The line is 628 miles long, standard gauge, and single-tracked except near the Yangtse terminus, where it is double. There are no tunnels, but several important bridges, notably those over the Yellow and Huai rivers.

At Peking the railway links up with the Peking–Mukden line; at Pukow a railway ferry makes connexion with the Shanghai–Nanking system; at Tsinan the Shantung Railway connects; and at Süchowfu the Lanchow-to-the-Sea main line.

Branches.—The following branches, all of standard gauge, are in operation:

(*a*) **Lokow–Huang-t'ai-ch'iao** (on the Yellow River) is $5\frac{1}{2}$ miles long and leaves the main line at mile 214 from Tientsin.

(*b*) **Yenchowfu–Tsining,** 20 miles, leaves the main line at mile 315.

(*c*) **Lincheng–Tsaochwang–Taierhchwang.** A colliery line of 19 miles leaves the main line at mile 374 to Tsaochwang, and thence another of 26 miles goes to Taierhchwang on the Grand Canal.

(3) **The Tsingtau–Tsinan Railway** was constructed under the conditions of the lease of Kiaochow to Germany. It was completed in 1904 and operated by a German company until the outbreak of the Great War (1914), when it passed under Japanese control. It is 256 miles long, standard gauge, has no tunnels and no large bridges.

Branches.—(*a*) The **Poshan** colliery line of 27 miles leaves the main line at Changtien.

(*b*) **Lungkow–Tsimo** is a military line built by the Japanese during the siege of Tsingtau. It runs almost exactly N. to S., and is about 100 miles in length.

Projects and extensions.—In 1913, by agreement with Germany, the latter was to construct two lines with the object of diverting to Tsingtau traffic which would normally go to the Yangtse or to Tientsin. These were :

(*a*) **Kaomi–Ichowfu–Hanchwang,** a line of 220 miles, which would link up Tsingtau with Süchowfu, the present terminus of the Lanchow-to-the-Sea Railway; and

(*b*) **Tsinan–Luanfu,** a westward line to connect with the Peking–Hankow Railway.

(*c*) **Chefoo–Weihsien.** This is a scheme to secure railway communications for the port of Chefoo. The line would be about 170 miles long.

(*d*) **Tehchow–Chengtingfu,** a line of 110 miles, to connect the Tientsin–Pukow and Peking–Hankow systems.

(4) **The Lanchow-to-the-Sea Railway** is intended to run from Haichow in North Kiangsu, or a port on the Yangtse, through Süchowfu, Kaifeng, Honanfu, and Sianfu to Lanchowfu in Kansuh province. It is being constructed in sections, of which the first, from Kaifeng to Honanfu, known as the Pien-Lo Railway, was completed and opened to traffic in 1909. Other portions have been undertaken by local Chinese companies, but all have been merged in a large scheme which has been the subject of a financial agreement concluded by the Chinese Government with a Belgian company in 1912. This has been brought practically to a standstill by the outbreak of the Great War, though work is still being continued by Chinese companies with limited resources. In 1916 it was completed from Süchowfu in the east to Kwanyintang (beyond Mienchih) in the west, about 350 miles. Westward the line is under construction as far as Sianfu, but it is not anticipated that the long tunnels beyond Kwanyintang will be completed before 1918. The length

from Süchowfu to Lanchowfu is about 900 miles. Eastward of Süchowfu there is completed a short section of 9½ miles from Tsingkiangpu to Yangchwang.

A project has been mooted to continue this trunk line 1,900 miles westward from Lanchowfu, through Hami and Kuldja, to connect with the Trans-Siberian Railway.

(5) **The Hankow–Szechwan Railway,** at the outbreak of the war in 1914, was being financed by American, French, and German groups, each nationality being responsible for a certain section of the line. The German section was from Hankow to Ichang, the American from Ichang to Chungking, and the French from Chungking to Chengtu.

The survey of 71 miles of the German section, from Hankow to Tsaoshih, was completed in October 1914, and work was commenced in December 1914, but abandoned shortly afterwards.

The American section—originally from Ichang to Kweichowfu, subsequently extended to Chungking—is very difficult from an engineering point of view. The construction was at first attempted by a Chinese company which made little progress. The American engineers made a new survey in 1913–14, and the estimated length of the section is now 404 miles. Apart from numerous bridges, the chief difficulty will be a tunnel of 17,500 ft. near the village of Nanto: the E. portal of the tunnel will be 13 miles W. of Ichang. Farther west the line will pass through Kweichowfu, Siaokiang, and Changshow Sze, following in the main the N. bank of the Yangtse. At the end of 1915 work was suspended, the available capital being devoted to the construction of the N. section of the Canton–Hankow Railway.

A final survey has not yet been made of the French section, which was intended to be part of a large Franco–Belgian scheme to link up Indo-China with North China and Siberia.

The gauge is the standard 4 ft. 8½ in., but the French wish to introduce the metre gauge on their section to conform with the gauge of the Indo-China and Yunnan railways.

Project.—In 1913 a concession was obtained by a Franco-Belgian syndicate for the construction of a railway northward

from **Chengtu** to **Tatungfu** on the Peking–Kalgan–Suiyüan Railway, through Sianfu and Tungkwanhsien, a total length of 900 miles. No details are settled.

(6) **The Pukow–Sinyangchow Railway.** The agreement for the construction of this line was concluded in 1913 by the Chinese Government with a British company, and a final survey was made in 1914. About 9 miles of embankment had been completed when the Great War broke out and caused a suspension of work.

The line will leave the Tientsin–Pukow Railway at Wuyi (Anhwei), and pass westward through Lüchowfu (mile 76), Liuanchow (mile 123), Kwangchow (mile 219), to Sinyangchow on the Peking–Hankow line. The total length is 285 miles. There will be no tunnels, but several bridges, the longest at Liuanchow over the Pi Ho.

A branch line is contemplated from Lüchowfu to Chengyangkwan on the Huai River, approximately 62 miles long.

IV. RAILWAYS SOUTH OF THE YANGTSE

(1) Shanghai—Nanking (Hu–Ning) Railway.
(2) Nanking—Changsha (Ning–Hsiang) Railway.
(3) Shanghai—Hangchow—Ningpo (Hu–Hang–Yung) Railway.
(4) Canton—Hankow (Yüeh-Han) Railway.
(5) Canton—Kowloon (Kwang–Kow) Railway.
(6) Shasi—Singyi Railway.
(7) Kiukiang—Nanchang (Nan–Hsün) Railway.
(8) Tayeh Railway.
(9) Yunnan (Tien–Yüeh) Railway.
(10) Bhamo—Tengyueh—Yünnanfu Railway.
(11) Yamchow—Yünnanfu Railway.
(12) Sunning Railway.
(13) Swatow—Chaochowfu (Chao–Shan) Railway.
(14) Amoy—Changchowfu (Chang–Hsia) Railway.

(1) **The Shanghai–Nanking Railway** was built by a British company (British and Chinese Corporation), and opened to

traffic in 1908. It is 193 miles long, of standard gauge, single throughout, but on the section between Shanghai and Soochow (53 miles) the earthwork and bridges have been made to take a double line. There is a short tunnel near Chinkiang. Bridges are numerous, but none of great length. The line is now managed by the Chinese Government.

Branches.—(*a*) **Shanghai–Woosung** (Sung-Hu) **Railway,** 10 miles long, standard gauge, connects Shanghai North station with Woosung.

(*b*) **Nanking City** (Kiang-Ning) **Railway,** 8 miles long, standard gauge, connects Hsia-kuan, the river port, with the centre of the city.

(2) **Nanking–Changsha Railway.** An agreement for the construction of this railway was concluded in 1914 by the Chinese Government with the British company which built the Shanghai–Nanking Railway, and a preliminary survey was made in that year. Approximate length of the line, 643 miles. It will probably pass through Ningkwofu, Hweichow, and Wuyüan in Anhwei; Loping, Nanchang, Changshu, and Pingsiang in Kiangsi; and thence along the existing colliery line to Chuchow and Changsha in Hunan.

There is an alternative proposal to run the line from Nanchang to Hangchow or Kashing, instead of Nanking.

(3) **Shanghai–Hangchow–Ningpo Railway.** Though the concession for this was originally granted to the British company above-mentioned (British and Chinese Corporation), construction was undertaken by Chinese provincial companies. In 1914 it was taken over by the Chinese Government and brought under the same management as the Shanghai–Nanking line. When completed it will be 220–30 miles long, but in 1916 only the section from Shanghai to Cha-k'ou (Zah-kou) on the Ch'ien-t'ang River, 117 miles, and 53 miles of the Ningpo section were in working order.

Branches.—(*a*) **Kung-ch'ên-ch'iao** (Kon-zen-chiao) branch connects the foreign settlement on the banks of the Grand Canal with the main line. Distance 4½ miles, standard gauge.

(*b*) **Shanghai Junction** (Loop) Line connects the termini

of the Shanghai–Nanking and Shanghai–Hangchow Railways. Total length about 8½ miles.

(4) **Canton–Hankow Railway.** This was originally an American concession, but it was redeemed in 1905 by the Chinese Government. Eventually the construction of the section from Canton to the border of Kwangtung was undertaken by the Chinese themselves, the rest of the line being built with British capital. In 1915 this southern (Kwangtung) section was opened to traffic as far as Shiuchow, 140 miles from Canton, and by the end of 1916 another 15 miles was completed. Farther north the country is more difficult, and construction has for the present been suspended.

On the northern (Hupeh and Hunan) section considerable progress has been made, and the line is practically finished from Wuchang opposite Hankow, via Yochow (mile 140), to Changsha (mile 225). The line is single throughout and of standard gauge.

Branches.—(*a*) **Canton–Samshui Railway** was begun in 1902 under the original Canton–Hankow concession. It starts at Shekwaitong opposite Canton, on the right bank of the river, and runs to Fatshan (mile 10) and to Samshui, 30½ miles. The line is double from Canton to Fatshan, single the rest of the way. Standard gauge.

There is a scheme to extend this railway along the West River to Wuchow, Sünchow, and Nanning.

(*b*) **Pingsiang** (Chu-Ping) **Colliery Line** connects the coal mines near Pingsiang Ki with Chuchow Hun. It was built by an American engineer, is 60 miles long, and of standard gauge. It will ultimately be absorbed by or linked up with the Nanking–Changsha Railway (see above).

Project.—**Hengchowfu–Nanning Railway** is to run from Hengchowfu (or some other station on the Canton–Hankow line) SW. to Kweilin, Liuchowfu, and Nanning. A small section from Chüanchow to Kweilin, 80 miles, was apparently surveyed in 1909.

(5) **Canton–Kowloon** (Kwang-Kow) **Railway** was built by a British company (British and Chinese Corporation) and opened to traffic in 1911. The last 22½ miles from Shumchün

to Kowloon lie in British leased territory. The whole line is 112 miles, of standard gauge and single-tracked.

A loop line connecting the termini of the Canton–Kowloon and the Canton–Hankow lines is contemplated. The distance between the two stations, 5 or 6 miles, has been surveyed, but a final agreement has not yet (1917) been reached.

Branches.—Three light railways (2-foot gauge) lead from the main line. They are :

(*a*) **Namkong–Lokong,** 5½ miles.

(*b*) **Sintsün–Tsengshinghsien,** 18 miles.

(*c*) **Fanling–Shatowkok,** 7¼ miles. This lies in British territory.

Project.—In 1902 a concession was apparently given to Portugal for the construction of a railway from **Canton** to **Macao,** but the syndicate concerned failed to raise the necessary funds. A fresh scheme was elaborated by the Chinese in 1913.

(6) **Shasi–Singyi Railway.** In 1914 a final agreement was concluded between the Chinese Government and Messrs. Pauling & Co. Ltd. (a British firm) for the construction of a railway from a point on the Yangtse opposite Shasi via Changteh, Yüanchow and Kweiyang to Singyi in Kweichow province, together with a branch line from Changteh to Changsha, on the Canton Hankow Railway, a total length of 750 miles. At Changsha it will also connect with the Nanking–Changsha line, and at Singyi it will ultimately link up with the projected French railway from Yamchow to Yünnanfu.

(7) **Kiukiang–Nanchang** (Nan-Hsün or Kiangsi) **Railway** was undertaken by the Chinese with Japanese engineers. The original scheme was to connect Kiukiang with the Canton–Hankow line at Shiuchow, but this is not likely to be carried out. The section as far as Nanchang was opened in 1915. The line is standard gauge and single-tracked, and about 80 miles long. From Kiukiang it runs S. almost parallel with the W. bank of the P'o-yang Lake. At Nanchang it will connect with the Nanking–Changsha line.

There is a Japanese project to connect **Foochow** with Nanchang and the Yangtse, by a railway up the Min valley.

(8) **Tayeh Railway** is a short line of 17 miles connecting Shihhweiyao on the S. bank of the Yangtse with the iron mines of T'ieh Shan. It is of standard gauge.

(9) **Yunnan** (Tien-Yüeh) **Railway** is a continuation of the French colonial railway from Hanoi to Laokay on the Tonkin border. Under a concession obtained from the Chinese Government this line has been carried from Hokow, opposite Laokay and the first town in Chinese territory, through Mengtsz to Yünnanfu. From the border to Yünnanfu the line is 288 miles long. The gauge is the French colonial or metre gauge.

Branch.—**Mengtsz–Kokiuchang,** 34 miles, to connect with the tin mines at the latter place. It was under construction in 1914.

Projects and extensions.—(*a*) **Yünnanfu–Suifu** (on the Yangtse). The contract for this was signed in 1914.

(*b*) **Langson–Lungchow.** A definite concession has been obtained for the extension of the Hanoi–Langson line beyond Dongdang as far as Lungchow. The objective is doubtless Nanning.

(10) **Bhamo–Tengyueh–Yünnanfu Railway.** By the Burmah Convention of 1897 China agreed 'hereafter to consider whether the conditions of trade justify the construction of railways in Yunnan, and in the event of their construction, to connect them with the Burmese lines'. The route from Bhamo to Tengyueh, 122 miles, has already been surveyed. This portion of the line would be, comparatively speaking, an easy and cheap undertaking, but between Tengyueh and Yünnanfu, via Talifu, the watersheds separating the Shweli, Salween and Mekong rivers have to be passed, involving great engineering difficulties.

Messrs. Pauling & Co. were given an agreement for the construction of the section from Talifu to Yünnanfu at the same time as the agreement mentioned under (6) above, Shasi and Singyi Railway.

(11) **Yamchow–Yünnanfu Railway** is the subject of an agreement signed in 1914, with the Banque Industrielle de

Chine. It provides for a line from Yamchow (Chinchow) on the coast of S. Kuangtung to Nanning, and thence up the Yukiang valley to Poseh and Kütsingfu (NE. of Yünnanfu), where it would link up with the Yünnanfu–Suifu line (see above under (*a*) of (9)). Between Poseh and Kütsingfu this line was to pass through the terminus of the Shasi–Singyi line (see above (6)). The section from Poseh to Yünnanfu was surveyed in 1911–12 by a Chinese company.

Project.—**Kwangchowwan–Nanning Railway.** A French scheme to connect Kwangchowwan with Nanning via Limchowfu and Hengchow was discussed in 1904.

(12) **Sunning Railway** was built by Chinese engineers with Chinese capital. It runs from Towshan, near the port of San-chia-hai (Samkaphoi), NW. to Sunning (mile 20), thence N. to Kungyi (mile 36) on the Sên-ch'eung creek, a large navigable waterway $\frac{1}{4}$ mile wide at the ferry station. It is not bridged, and the crossing is made by train ferries. Beyond the creek the line bends E. to Kongmoon on the West River (mile 64) and thence 3 miles farther to Pakshek and Pakkai (Pei-chieh), 67 miles in all. It is single and of standard gauge. It is being extended to Yeungkong, a distance of 80–90 miles, and construction work was begun in 1917.

(13) **Swatow–Chaochowfu Railway** is a short line built by Japanese engineers with Chinese capital. Total length 27 miles. The track is single, standard gauge.

A scheme for connecting this railway with either the Canton–Kowloon or the Canton–Hankow line has been under consideration.

(14) **Amoy–Changchowfu Railway.** The funds for this line were provided by the Chinese, the construction being under the same direction as the Swatow–Chaochowfu Railway, with which it is ultimately to be connected. In 1916 it was completed from Sung-hsü, opposite Amoy, to the river Kiu-lung, 20 miles. The line is single and of standard gauge. It has been badly laid and is not in good order.

Project.—**Anhai–Chüanchowfu,** a distance of 25 miles. A Japanese scheme to connect these places with a light railway.

CHAPTER XVI

WATERWAYS AND INLAND NAVIGATION

General Survey—Pai Ho—Yellow River—Huai Ho—Yangtse Basin—Ch'ien-t'ang River—Min River—West River—Canton Delta.

General Survey.—No country in the world is so well watered as China, nor has any other nation developed its inland water communications to the same extent. The vast system of rivers and canals which cover the face of the land is of inestimable value for travellers as well as for the transit of merchandise. As Richthofen says, 'the absence of wagon roads, the scarcity of beasts of burden, the cheap wages, and the little value of time render it possible for the Chinese to apply boat navigation with pecuniary advantage where the difficulties, expenses, and risks would be found too great in Europe.'

Proceeding from north to south, seven important river basins may be distinguished :

(1) The **Pai Ho** (Pei Ho) and its tributaries, which water the east of Shansi, the best part of Chihli, and small portions of Shantung and Honan.

(2) The **Yellow River** system, traversing Kansu, Shensi, West Shansi, North Honan, a narrow strip of Chihli, and Shantung.

(3) The **Huai Ho,** draining the larger portion of Honan and North Anhwei.

(4) The **Yangtse,** which passes through the provinces of Yünnan, Szechwan, Hupeh, Kiangsi, Anhwei, and Kiangsu. Its tributaries also extend into Kansu, Shensi, and Honan in the north, besides watering the northern half of Kweichow and the whole of Hunan and Kiangsi.

(5) The **Ch'ien-t'ang** and (6) **Min** Rivers, which drain the greater part of Chekiang and Fukien respectively.

(7) The **West River** system, which comprises East Yünnan, South Kweichow, practically the whole of Kwangsi, and by far the largest and richest part of Kwangtung. To these must be added the partly natural, partly artificial waterway of

(8) The **Grand Canal,** which passes through the maritime provinces of Chihli, Shantung, Kiangsu, and Chekiang, thus serving as a link between the basins of the Pai Ho, Yellow River, Huai, Yangtse, and Ch'ien-t'ang.

These systems vary greatly in size and importance. The following table,[1] giving the mileage of the navigable rivers and canals in China Proper, serves to show the immense preponderance of the Yangtse Basin. If waterways navigable for small craft only were included, the total mileage would certainly be much increased. The West River Basin easily occupies the second place; for the Yellow River, in spite of its great length and volume, has comparatively little value as a navigable stream.

Navigable Rivers.	*Navigable for Steamers.*	*Navigable for Steam-launches only.*	*Navigable for Junks only.*	*Total.*
	miles.	*miles.*	*miles.*	*miles.*
The Yangtse . . .	1,400	300	200	1,900
Its tributaries in Szechwan	—	217	1,402	1,619
,, ,, Hupeh .	—	500	940	1,440
,, ,, Hunan .	275	37	390	702
,, ,, Kiangsi .	260	160	1,712	2,132
,, ,, Anhwei .	—	540	482	1,022
,, ,, Kiangsu .	13	1,001	363	1,377
Total for Yangtse Basin .	1,948	2,755	5,489	10,192
Rivers in Chekiang . .	33	167	382	582
,, ,, Fukien . .	25	52	502	579
,, ,, Kwangtung and Kwangsi . .	353	1,415	1,461	3,229
,, ,, Shantung . .	33	127	270	430
,, ,, Chihli . .	37	195	1,059	1,291
The Yellow River . .	—	—	1,200	1,200
Total for all Rivers . .	2,429	4,711	10,363	17,503

[1] From the Chinese Annual for 1912, published by the *Tō-a Dōbun Kwai.*

The province of Chihli is well irrigated by a number of rivers flowing into the gulf of the same name. The **Lan Ho,** which traverses its northern parts, is not much used by junks, which cannot get up from the sea unless the river is in flood ; but higher up, small boats ascend the stream as far as Lan-ho-k'ou, 3 or 4 miles from Jehol.

The Pai Ho.—Tientsin, the great entrepôt for commerce in North China, lies at the confluence of several large rivers or canals. The **Pai Ho,** which is regarded as the main branch, is connected with Peking by a canal, 15 miles long, at Tung-chow Chi. The distance by water from this city to Tientsin is 92½ miles. Here the Pai Ho attains a width of 300 yds., and a wharf nearly 2 miles long affords steamers and junks every facility for coming alongside. The **Hai Ho,** as the lower course of the Pai Ho is called, is navigable by sea-going steamers, although the sand bar at its mouth renders the passage difficult. Once the bar is crossed, however, there is plenty of water all the way to Tientsin, a distance of some 40 miles. Numerous steam-launches, tugs, and lighters ply between the Taku anchorage and the ports on the Hai Ho.

The **Hun Ho** and the **Hu-t'o Ho** (or Hsi Ho), which join the Pai Ho a little above Tientsin, are large rivers, but hardly navigable except for a short distance near their mouths. The **Ta-ch'ing Ho,** on the other hand, which flows into the Hu-t'o Ho, forms with its tributaries a useful and fairly extensive system of waterways between these two rivers. Junks ascend the main stream to Paotingfu (84½ miles from Tientsin) at all seasons of the year.

The **Grand Canal,** which in the province of Chihli has a minimum depth of 6 ft., also meets the Pai Ho at Tientsin, and is an important line of communication. Between the Yellow River and Lintsingchow the bed of the canal is dry during the greater part of the year ; but from the latter place onward it follows the winding course of the **Wei Ho,** which has been embanked, and becomes wide and deep enough for shallow draught launches after Tehchow. The Wei Ho connects Tientsin by water with the city of Weihwei in Honan.

The **Pei-t'ang Ho,** which flows into the Gulf of Chihli a few miles north of the Pai Ho, feeds a network of canals extending over a considerable area. The Lutai Canal, or rather the valuable part of it, lies between Sükochwang and the Pei-t'ang Ho, being also continued to the Pai Ho, which it joins just above Tientsin. The supply of water is regulated by lock gates. Much of the country lying between Peking and the coast is liable to be flooded in summer, owing to the fact that the rivers are in many places above the level of the plain.

All the year round, except during the frozen months (middle of December to middle of March), the above-mentioned waterways are busily thronged with junks of some 20 different types. The majority are flat-bottomed, with one mast, and capable of carrying 60 tons of cargo, but there are also sea-going vessels with two or three masts, of more than twice that capacity.

The Yellow River.—The **Huang Ho,** or Yellow River, enters Kansu at an altitude of 8,200 ft., and leaves the province at about 3,300 ft. above sea-level. Though it receives two large tributaries, it does not become navigable except for rafts until after Chungweihsien. In its middle course, where it forms the boundary between Shensi and Shansi, it again flows too impetuously for navigation, except in certain places, as from Puchowfu to Tungkwanting. The **Fên Ho,** the chief river of Shansi, comes in on its left, and the **Wei Ho** [1] on the right. The Wei Ho runs through the loess plateau of the north in deeply cut channels, and is not navigable until it reaches Hingping. Only boats of shallow draught ply on its waters, for though it becomes fairly wide as it approaches the Huang Ho, it never runs deep. Its chief affluent, the **Ching Ho,** waters the whole north-eastern part of Kansu.

Throughout its lower course, when traversing the plains of Honan and Shantung, the Yellow River receives no important tributary, nor is it easily navigable itself except in short stretches. The mud and sand carried down by its current

[1] Written with a different character from the Wei that flows into the Grand Canal.

have raised the bed of the river several yards above the level of the surrounding country, so that it has to be embanked. Prior to 1851, in which year the dikes gave way to the NE. of Kaifeng, it ran south of the Shantung promontory. After considerable variations it finally abandoned its old bed and followed that of the Chi Ho, a small river flowing into the Gulf of Chihli. Its turbulence and sudden diversions account for the fact that neither along its middle nor its lower course is any important city built on its banks. The normal flow of the Yellow River has been reckoned at a little over 4,000 cubic yards per second near Tsinan, but it is quite three times as great as this in the flood season. The **Hsiao-ch'ing Ho,** a canal which originally formed the lower course of the Chi Ho, connects Tsinan with the sea, and is the natural outlet for exports from Shantung to Chihli, Manchuria, and the north generally. The traffic on this canal is enormous, as many as 20,000 junks plying annually between its mouth and Huang-t'ai-ch'iao, the port of Tsinan lying 2 miles NE. of that city.

Navigation on the section of the Grand Canal immediately south of the Yellow River is impracticable in many places, chiefly on account of sand-banks and the lack of a regular supply of water. The **P'o Ho,** a short waterway joining the Grand Canal at An-shan to the Yellow River at Chiang-chia-kou, is largely used for the transportation of goods.

The Huai Ho.—The **Huai Ho** and its tributaries, the largest of which is the Sha Ho, drain the greater portion of Honan and the northern half of Anhwei. It is navigable throughout almost the whole of its course, from Siyangchow to the Hung-tsê Lake, a distance of about 350 miles, and is already a large river when it reaches Anhwei, though it is in this province that it receives its principal affluents. Of these the Sha Ho is a fine stream 150–500 yds. broad, and navigable all the year round from Siangchenghsien in Honan, though the velocity of the current often rises in the wet season to as much as 5½ knots an hour. The Huai itself generally breaks through its embankments in the summer, and floods the

country about Wuhohsien. It is navigated by native craft up to 70 or 80 tons.

The **Hung-tsê Lake** is one of the four largest lakes in China, being 45 miles long by 20 miles wide in its eastern part. The depth varies from 2 to 5 ft., in spite of which it is crossed by junks in every direction, several channels connecting it with the Grand Canal and with the Kaoyu Lake. But for its shallowness light draught steamers and gunboats could sail up the Huai as far as Chengyangkwan in western Anhwei, and even beyond.

Besides the Sha Ho, which is one of the main lines of communication between Honan, the Yangtse, and Shanghai, two of the tributaries of the Huai are important waterways : the **Kuo Ho** and the **Pi Ho,** which are navigable up to An-lu (10 miles above Pochow An) and Liuanchow respectively.

The Grand Canal between the Yellow River and Tsing-kiangpu is shallow, much interrupted by locks, and therefore little used, but between the latter place and the Yangtse it is fed by a number of large lakes on either side, and becomes a great highway of communication. Several Chinese and Japanese companies have launches plying between Tsing-kiangpu, Yangchow, Soochow, and other places in Kiangsu, which province—especially between Yangchow and the sea, and in the neighbourhood of Shanghai—is a regular network of canals running in every direction.[1]

The Yangtse Basin.—The **Yangtse** is usually set down as about 3,200 miles long, though some writers make it as much as 3,500 miles, the difference being due largely to a lack of accurate knowledge concerning the river's upper course. Rising in Tibet, this great waterway divides China into two almost equal halves, with eight provinces on either side, whilst Anhwei and Kiangsu are bisected by it. The Yangtse Basin covers an area of 700,000 sq. miles, with a population of some 200 millions, and is remarkable for its immense natural wealth and the variety of its products. The river is

[1] For the Grand Canal and other waterways of Kiangsu see the Admiralty Handbook of China, Vol. II, Kiangsu.

navigable for nearly half its entire course, and the volume of water brought down at its mouth is estimated at 770,000 cubic ft. per second. It is known by a variety of names in different parts of its course, the commonest being Ch'uan Chiang (River of Szechwan), Ta Chiang (Great River), Ch'ang Chiang (Long River), or simply Chiang. The towns on its banks include such important commercial and industrial centres as Tungchow, Kiangyin, Chinkiang, Nanking, Wuhu, Tatung, Anking, Hukow, Kiukiang, Hankow, Hanyang, and Wuchang, Sinti, Shasi, Ichang, Kweichowfu, Wanhsien, Fengtuhsien, Chungking, and Suifu. Three main sections of the river may be distinguished : (1) The torrential section, extending from its source to Pingshan Sze, a little above Suifu (roughly 1,500 miles) ; (2) the semi-navigable section, from Pingshan to Ichang (700 miles) ; and (3) the navigable section, from Ichang to the sea (1,000 miles).

When the Yangtse crosses the Szechwan frontier its bed is still at an altitude of 15,700 ft., and it flows swiftly between high mountain barriers throughout most of its course in this province. Before making its final bend to the north it receives its longest tributary on the left, the **Ya-lung Chiang,** torrential like itself. By the time it reaches Pingshan its bed has dropped to only 1,000 ft. above sea-level. From this point on the Yangtse can be used by boats except in the region of the rapids, and it is now augmented by three affluents coming from the interior of Szechwan : (1) The **Min Chiang,** which becomes navigable for small craft as soon as it enters the Chengtu plain, where it splits up into numerous branches and continues its course to the south, and for junks below Kiatingfu. As a waterway, therefore—to say nothing of its immense service in irrigation—it is far more useful than the main stream above Pingshan. (2) The **Lu Ho** is a somewhat shorter river which is navigable below Kienchownan. (3) The **Chia-ling Chiang,** the longest of the three, rises in Kansu, becomes navigable for small craft at Kwangyüan, for larger junks at Paoning (though navigation is only easy up to Hochow Sze), and ends at Chungking. Its own affluents, the

Fou Ho and the **Ch'ü Ho,** are also fine rivers, navigable for a great distance inland.

These three rivers always have water in abundance, but their current is rather strong, and they are often obstructed by rapids.

The affluents on the south are of less importance; but the **Hêng Chiang** forms the principal water communication between Yünnan and Szechwan, the **Wu** (or **Kung-t'an**) **Chiang** affords access to Kweichow, and a small affluent of the Yüan Chiang is the direct route for all traffic between Szechwan and Hunan.

Between Chungking and Wanhsien the river is 500–650 yds. wide and generally 20–30 ft. deep, and is navigable with comparative ease. But between Wanhsien and Ichang its channel is narrowed down to some 80 yds. and shut in by precipitous mountain walls on both sides. In this section occur the Three Gorges, renowned for their scenery, and numerous rapids render navigation very difficult. Junks have to be hauled painfully upstream by trackers, so that the voyage from Ichang to Chungking may take as much as 50 or 60 days. A service of three steamers was inaugurated on this route in July 1914, each making two trips a month. They take one week going up, and three days coming down. At Ichang, though nearly a thousand miles from the mouth, the bed of the river is only 130 ft. above sea-level, and the volume of water there is 244 times that of the Thames at London Bridge.

The Yangtse now enters the lowlands, and meanders through the extensive alluvial plain of Hupeh. During the remainder of its course it is fringed by a number of lakes, mostly large and shallow, which play the part of reservoirs; in summer, that is to say, when the river is exceptionally high, they absorb its surplus waters, whereas in winter they serve to feed the river and keep it at a comparatively high level. It is partly owing to these lakes, therefore, that the inundations of the Yangtse are less sudden and disastrous than those caused by the Yellow River, which has no similar system of reservoirs.

The largest of these lakes is the **Tung-t'ing,** which is 75 miles long by 50 miles broad. In summer its area is larger, but in winter it becomes little more than a marsh, through which several streams flow. It is connected with the Yangtse by a short waterway at Yochow and a number of other canals, and is the centre of a very active movement of junks. The principal lines of water communication are : (1) to Canton by the **Hsiang River,** which is connected with the Kuei River in Kwangsi by a small canal with lock gates. Traders often prefer to branch off by the **Lei River** at Hengchowfu, which takes them to the Chê-ling Pass leading into Kwangtung. Three steamship companies have opened regular services between Hankow and Changsha, and steam-launches run up the Hsiang River to Siangtan. (2) Along the **Yüan River** to Changteh, and as far as Chenyüan in Kweichow, 423 miles above that city. (3) From Changteh to Shasi on the Yangtse via Tsingshih, the port of Lichow. A canal navigable for junks of all sizes also goes from Owchihkow, 60 miles below Shasi, to Hwajung on the N. side of the Tung-t'ing Lake. (4) To the important district of Paoking by the **Tzŭ River,** though owing to rapids this is not much used as a trade route beyond Yiyang. On the whole, considering its inland position, the province of Hunan is remarkably well provided with serviceable waterways.

The next large affluent of the Yangtse is the **Han Shui,** a magnificent river which is now navigated by small steamers as far north as Siangyangfu (300 miles from Hankow), and during the summer freshets by junks and small craft up to Hanchungfu in W. Shensi, 600 miles farther. One of its affluents, the **Tan Chiang,** gives access to the ancient capital Sianfu. Throughout Shensi the Han is obstructed by rapids, and becomes navigable with safety only at Laohokow, where it widens out to 850 yds. Farther on it narrows again, and at its mouth, where the three cities of Hankow, Hanyang, and Wuchang are situated, has a width of only 200 ft. in the lower-water season. Small river steamers are run by two Chinese companies between Hankow and Sientaochen ; in

winter they can only get up as far as Tsaitien. The series of lakes between the Han and the Yangtse are connected by a network of canals, much frequented by small craft. The junks which engage in traffic with Hankow as their base must total at least 25,000. Immense numbers of them are always to be found moored at the mouth of the Han Shui, where they extend for 5 miles along both banks. Six steamship lines, native and foreign, are maintained between Hankow and Shanghai, and four between Hankow and Ichang. There is also a cargo service from Hankow to Japan in summer.

The last great affluent reaching the Yangtse (430 miles from the sea) is the **Kan Chiang,** which traverses the province of Kiangsi from S. to N., flows through the P'o-yang Lake, and drains a vast and populous area. It is navigable in summer for almost its entire length of 300 miles to Nananfu, whence goods are carried over the Mei-ling Pass to be reshipped at Namyung on the Pei Chiang, only 150 miles from Canton. Several of the affluents of the Kan Chiang are also important : the **Chang Shui,** forming part of another trade route to Canton ; the **Fu Ho,** notable for its large junks, and the **Kwangsin River,** for its extreme navigability, small boats ascending right up to Yüshan, where there is communication with the basin of the Ch'ien-t'ang River.

The **P'o-yang Lake** is about 90 miles in length and almost 20 miles in breadth, but its condition, like that of the Tung-t'ing Lake, differs widely at various seasons of the year. Though it would appear to be gradually silting up, junks are able to ascend at all seasons to Wucheng Ki, its chief port and commercial city, and several steam-launch companies compete for the passenger traffic between Kiukiang and Nanchang. The lake is surrounded by a vast system of canals which serve the treble purpose of intercommunication, irrigation, and drainage. So numerous are the waterways of Kiangsi, both natural and artificial, that it is possible, at certain seasons of the year, to go from any one large city in the province to any other entirely by water. But towards

the end of summer, the water is drained from the canals on to the rice-fields and their beds often left absolutely dry.

The Yangtse throughout the lower part of its course often exceeds a mile in width, and is from 30 to 60 ft. deep. In the summer season ships drawing 25 ft. can sail up to Hankow, and at all times those of 27 ft. draught can reach Nanking. The **Huang-p'u,** or Shanghai River, is a short but useful waterway. Ships of heavy tonnage can come up to Shanghai, and the river is connected with a perfect maze of canals, small lakes, and lagoons. The largest body of inland water in Kiangsu is the **T'ai Hu,** which has an area of about 1,000 sq. miles, but seldom reaches a depth of more than 5 or 6 ft. Its overflow runs into the Grand Canal, which skirts it on the east, passing through Soochow and terminating at Hangchow, without, however, joining its waters to those of the Ch'ien-t'ang River. In order to continue one's journey to Shaohingfu and Ningpo it is necessary to cross in a ferry-boat to Sihing, and there change again into a canal boat. Shaohingfu is situated in the midst of a fertile plain intersected by large canals. An important waterway connects this city with a tidal branch of the **Yung Chiang,** or Ningpo River, at Yüyao. The other branch, which meets it at Ningpo, is also navigable, and steam-launches ascend to a point within 5 miles of Fenghwa. Below Ningpo the river is navigable for ships of 17 ft. draught, and the volume of sea-borne traffic is considerable.

The Ch'ien-t'ang River.—Apart from the cultivated plains in the north, and along the south of Hangchow Bay, the whole of Chekiang is mountainous, yet well provided with rivers. The largest of these is the **Ch'ien-t'ang Chiang,** which is navigable in both its upper branches, uniting at Chüchowfu. Two large affluents come in at Lanchi and Yenchow, each of which has many navigable tributaries. On the main river boats of 3 ft. draught can reach Chüchowfu any time between April and November, while launches run regularly between Hangchow and Tunglü. It is a noteworthy fact that every one of the 29 official cities in the Ch'ien-t'ang Basin can be

reached by boat at the high-water season. Owing to the shallowness of Hangchow Bay and the tidal bore which runs up the estuary no steamers enter the mouth of the Ch'ien-t'ang River, though local sea-going junks come in to Hangchow and sometimes ascend to Fuyanghsien. The **Wu Chiang** in the south of the province is a fine river which, despite its rapids, is navigable for fairly large boats up to Chuchow. The treaty-port of Wenchow is situated a few miles above its mouth.

The Min River.—Although the province of Fukien, like its neighbour on the north, is almost wholly mountainous, the inland water communications are wonderfully good. The three principal branches of the **Min River,** which unite at Yenpingfu, are all navigable for a great distance except in the flood season. Thus, on the Kienningfu branch, the largest size of ordinary tea-boats go to the town of that name, while boats of the Kiangsi build go right up to Kienyang Fu, and small ones capable of navigating rapids go up the two forks to Masha and Tsung-an Hsien. On the Pucheng branch to the north similar small boats go up as far as that town, while raft navigation is possible 28½ miles farther still, to Hua-ch'iao. Salt-boats ascend the Wu Chiang to Patu Che, only 12 miles from Hua-ch'iao, so that it is possible to make nearly the whole journey from Wenchow to Foochow by river. On the NW. branch, rising in Kiangsi, boats drawing 2 ft. can ascend to Kwangtseh, some 20 miles beyond Shaowu. This branch is joined by the **Ao Chiang,** which is also navigable nearly up to the border of Kiangsi. Another route through the province can be taken up the **Sha Ch'i** past Yungan to within 40 or 50 miles of Tingchowfu, and thence down the Han river to Swatow. After Yenpingfu the Min River is completely formed, but shoals, rocks, and rapids render it of little use till Shuikow Fu is reached, where fair-sized junks find water enough in every season. Thirty-two miles below Foochow the river flows into the China Sea by two branches, between which lies the island of Wufu. The northern channel is the deeper, and at high tide large steamers come 22 miles up the

river to Pagoda Anchorage. Between this point and Foochow, however, the Min is now scarcely navigable, and is silting up more every year.

The West River.—The **Hsi Chiang,** or West River, divides at Sünchow into two large branches, each of which has some claim to be regarded as the main stream. The northern branch, or **Hung-shui Chiang,** rises in the high table-land of Yünnan, and, after marking the boundary between Kweichow and Kwangsi, traverses the latter province from NW. to SE., becoming navigable a little above Tsienkiang. It receives the **Liu Chiang** on the left, which is navigable for large junks up to Changan, but is specially used for the transport of timber, which is floated down from Hunan and Kweichow. The Hung-shui River passes through poor country and has no towns of much importance on its banks.

The southern branch of the Hsi Chiang, sometimes known as the **Yu Chiang,** also issues from Yünnan. It is navigable for small boats from Poyai on the western frontier of Kwangsi, and for quite large junks only 12 miles farther down, at Poseh. On its right it receives the **Tso** (or **Li**) **Chiang,** formed by the confluence of two rivers which come from Tonkin and unite at Lungchow. Both are navigable, though freshets are common. Below Lungchow the country is wild and barren, and the course of the river narrow and winding until its junction with the Yü Chiang, soon after which the busy town of Nanning is reached. The river is now wide and deep until the rapids begin, of which there are a great number, requiring an experienced pilot. Between Kweihsien and Sünchow it is like a canal, but below this its course again becomes tortuous, and rapids are of frequent occurrence. At Wuchow the **Kuei Chiang** comes in on the left, having a width of 330 yds. near its mouth. This river gives access to Hunan by way of Kweilin, the capital of Kwangsi.

Wuchow is the chief river port after Canton, being the head of navigation for steamers and larger boats—up to 400 tons burthen—which are unable to ascend rapids. According to the latest information, however, two sand-banks at a little

distance below the port have seriously interfered with its trade; and, unless dredging operations are undertaken, vessels drawing 7 ft. will have to ship and discharge cargo at a point 23 miles below Wuchow during the low-water season. Floods occur very suddenly on the West River between April and November of each year, and the level of the water often rises more than 60 ft.

When the Hsi Chiang enters Kwangtung it is already a fine large river. At Shiuhing it is over a mile wide. Farther on it passes through a gorge 3 miles long, where it narrows to 270 yds., but widens anew to a breadth of one mile. The **Pei Chiang** (North River), which comes in on the left at Samshui, 110 miles below Wuchow, is navigable, though with some difficulty, from Namyung. At Shiuchow, where the **Wu Shui** flows in from S. Hunan, it becomes navigable for large boats, though the summer freshets render its current very violent and hard to ascend. Its principal tributary on the right is the **Linchow River,** navigable up to the town of the same name in the NW. corner of Kwangtung.

The Canton Delta.—At Samshui the Hsi Chiang divides into several branches, and the delta begins. The northern branch, called Chu Chiang, or **Pearl River,** flows past Canton, receives the waters of the **Tung Chiang** (East River) on the left and, passing through the Bocca Tigris (Foomoon), empties itself by a broad estuary into the sea. The Tung Chiang with its tributaries drains the greater part of E. Kwangtung, and is much used for navigation. During the last 70 miles of its course it passes through the large towns of Waichow, Poklo, and Sheklung, and flows through a small delta into the large delta of the Hsi Chiang, which it enters by eight channels, extending from just above Whampoa to just below Taiping Tung.

The southern or main branch of the Hsi Chiang passes the important towns of Kowkong and Kumchuk, and enters the sea to the W. of Macao. Lying principally between these two branches is an alluvial plain 60 miles long by 20 to 25 miles in breadth, intersected by a maze of waterways,

along which countless boats are constantly plying. The following waterways deserve special mention :

(1) The Sainam Creek, on which are situated the towns of Sainam (the centre of the junk traffic), Tzetung, and Shekwan. This creek passes S. of Fatshan and the waterway leading to the Pearl River. On the right, going down, it connects with

(2) The Laklow Reach, flowing past Kwanshan and Shatow to Laklow ; and on the left with

(3) The Chanchuen Creek, which passes through the town of that name.

(4) The Sailam Channel, which branches to the E. from the main stream just below Kumchuk and enters the estuary of the Pearl River at Wangmoon.

(5) The Kongmoon Creek, which flows past the town of Kongmoon to the sea through the Aimoon Pass, and receives *en route* the waters of the Tamkong from Chikhom and Sunwui.

(6) The Shekki Creek, which leaves the West River just below Kongmoon and divides into two branches, one of which connects with the Sailam Channel, while the other passes the town of Shekki and re-enters the main stream just above Pinglam.

This splendid system of waterways, furnishing as it does direct communication between all the important markets in three great river basins and in the rich Canton delta, renders trade between the various parts of the country both cheap and speedy. It must be added that these natural advantages are somewhat counteracted by the shifting sand-banks which the absence of any system of conservancy has allowed to impede navigation, as well as by the destructive floods which the denudation of the hillsides causes during the heavy summer rains. On the other hand, piracy, which was once so prevalent, has been almost wholly suppressed.

There is an excellent service of steamers between Hongkong, Canton, and Wuchow, run by Chinese, French, and English companies. The trip from Hongkong to Canton (89 miles) occupies 7 to 8 hours, and to Wuchow 48 hours. The port

of Canton could with little expense be adapted for the largest steamers, but the Chinese have increased the natural obstacles by raising artificial barriers intended to block the port. At present Danes Island divides the stream into two channels, of which the Whampoa Channel is not attempted by vessels drawing more than 11 ft., though Whampoa itself (8 miles below Canton) can be reached by vessels of 23 ft. draught, crossing Second Bar at high water. The Blenheim Passage is longer but deeper, but it is inadvisable for vessels of over 17½ ft. draught to attempt the passage of the Tai-shek Barrier even at highwater springs. These two channels meet again at Honam Point opposite Shameen Island.

The journey from Canton to Poseh or Lungchow may take three months by junk, and the return journey 15–20 days. Junks are now regularly towed up the West River by tugs, steam tugs being used on the lower course, and petrol tugs over the middle and upper course. A regular service of launches has been established, running to Sünchow in winter, and during the high-water season as far as Lungchow, Poseh, and Linchowfu. One can get from Wuchow to Nanning by petrol boat in four days, and from Nanning to Poseh in three days.

CHAPTER XVII

POSTS, TELEGRAPHS, AND TELEPHONES

The Post Office

From very early times the Chinese Imperial dispatches were transmitted by a relay system of couriers, known as *I-chan*, forming a kind of special postal service for official use. The people, debarred from using this, found means of sending their letters and parcels through certain forwarding agencies which were organized by the merchant class. In this way a far-reaching and on the whole very reliable system of intercommunication by hongs or agencies, known as *Min-chü*, was established throughout the country.

Shortly after 1861, when the foreign ministers had taken up residence at Peking, the Imperial courier system was utilized by the *Tsungli Yamên* (foreign office) to exchange legation and customs mails between Shanghai and Peking; and in the open season the coastal steamer service was employed for the same purpose. This led to the opening of quasi-postal departments at the Custom Houses concerned, and the first step was taken towards a Chinese Imperial Post.

The next stage included the experiment of a Native Post Office alongside the Customs' post in 1878, the establishment of postal couriers between certain selected centres, and the introduction of Customs' postage stamps. In the same year China was formally invited to join the Postal Union, but she preferred to defer this step until her postal arrangements were more mature. The postal idea was backed by the great Viceroy of Chihli, Li Hung-chang, and in spite of the opposition by vested interests in the *I-chan* and *Min-chü* it gradually took a firm hold of the country. Finally in 1896 an Imperial decree ordered an Imperial Post Office for all China to be

modelled on Western lines under the direction of Sir Robert Hart, who now became Inspector-General of Customs and Posts. It was to be conducted by a branch of the Imperial Maritime Customs, and all official mails except those for the NW. provinces were to be carried by it.

In 1910 the *I-chan* were transferred to the Ministry of Posts and Communications, and the conduct of the Post Office was transferred to this same ministry in May 1911, a special department known as Directorate-General of Posts being established.

In 1914 China formally entered the Universal Postal Union, and on September 1st of that year the regulations of the Rome Convention became operative in China, and China signified her adherence to the Parcels Post Convention.

On the declaration of the Republic in 1911 the post office took up a position of provisional neutrality; but such was the growth of public confidence in its organization that it came through the troublous time of revolution and insurrection with increased prestige. Meanwhile there had been no official interference with the *Min-chü* so long as they conformed to the postal laws, but they are being gradually eliminated by the competition of the official post. Much of their 'clubbed mails' is actually carried by the Imperial Post.

The difficulties encountered by the postal service in China owing to the notoriously bad roads and the limited railway facilities would be hard to overestimate. It makes use of every available means of transport—railways, steamer lines, junks, boats, mounted and foot couriers, carts and wheelbarrows; but by far the largest part of the work is done by the courier lines which now spread their ramifications over the whole of China. Since 1910 day and night services have come into use on most of the important routes; and on the whole there has been very little interruption of communications from bad weather, floods, and brigandage. Indeed this excellently organized service has grown steadily in the popular esteem and bids fair to become part of the life of the nation.

At the end of 1901 there were 176 postal establishments in China dealing with $10\frac{1}{2}$ million articles. Some idea of the progress since made can be obtained by comparing these figures with the statistics for the Chinese Empire given in the later Post Office Reports :

Communications.	1908.	1915.
Courier lines	about 68,300 miles.	about 136,000 miles.
Native boat lines	„ 6,830 „	„ 21,200 „
Steamboat lines	„ 8,000 „	
Railway lines	„ 4,000 „	„ 6,300 „

General Statistics.	1909.	1915.
Head offices	47	21
First, second, and third class offices and sub-offices	605	1,567
Agencies	3,606	6,923
Articles dealt with	306,000,000	773,183,122
Registered articles	25,598,000	66,601,000
Express letters	908,000	6,290,670
Articles collected from letter-boxes, box offices, and pillar boxes	16,044,000	41,972,700
Letters in native clubbed mails	8,411,000	6,381,500
Parcels	3,280,000	9,209,886
Money orders issued	4,866,000	13,552,200
Money orders cashed	4,843,050	13,469,200

The usual postal facilities are given for letters, postcards, newspapers, printed matter, commercial papers, samples and patterns, registration, parcels, insurance and money orders. There is a *poste restante* at every post office. The system of express letters has been very successful. An extra charge is made for these, but they are handled by a special staff and delivered with greater rapidity than the ordinary mails.

There are post offices in all towns of any importance, and agencies are rapidly increasing in number throughout the empire. Ordinary stamps and postcards are obtainable at the agencies ; but, as a rule, neither they nor the less important post offices, which have no money transactions, stock stamps of high value.

The ordinary rates of postage are :

Mail Matter.	*Unit of Charge.*	*Local.*	*Domestic.*	*Union. (foreign).*
Letters.	Each 20 grm. or fraction thereof.	1 cent.	3 cents.	
	First 20 grm. or fraction thereof.	—	—	10 cents.
	Each successive unit or fraction thereof.	—	—	6 cents.
Postcards.	Single.	1 cent.	1 cent.	4 cents.
	Double (reply paid).	2 cents.	2 cents.	8 cents.
Newspapers.	Singly or in bundles (not exceeding 2 kilos).	½ cent. per 100 grm.	½ cent. per 50 grm.	2 cents. per 50 grm.

For special tariffs for particular districts, and for tariff on books, &c., samples, and parcels see *Postal Guide*.

Most of the foreign powers have post offices in Peking and certain treaty-ports.

Great Britain has post offices at Tientsin, Chefoo, Hankow, Shanghai, Ningpo, Foochow, Amoy, Swatow, Canton, Kiungchow, Weihaiwei.

France has post offices at Peking, Tientsin, Chefoo, Chungking, Hankow, Shanghai, Ningpo, Foochow, Amoy, Canton, Pakhoi, Kiungchow, Lungchow, Mengtsz, Yünnanfu.

Russia has post offices at Peking, Tientsin, Chefoo, Hankow, Shanghai, and at numerous places in Manchuria.

Japan has post offices at Amoy, Canton, Changsha, Chefoo, Chinkiang, Foochow, Hangchow, Hankow, Kiukiang, Nanking, Newchwang, Peking, Shanhaikwan, Shasi, Shanghai, Soochow, Swatow, Tientsin, Tangku, and Wuhu; besides those in Manchuria and the leased territory.

Direct communication between London and Peking *via* Siberia began in November 1912. The Tientsin-Pukow railway now links up this system with Nanking and Shanghai.

Letters and postcards from Wenchow northwards for Europe are sent *via* Siberia unless specially marked *via* Suez. For parts south of Wenchow the public may mark letters, &c. *via* Suez or *via* Siberia; otherwise they will be sent by the most direct means available.

Telegraphs

In 1871 the Eastern Extension Telegraph Co. connected Shanghai, Hongkong, and Singapore with Madras and so with Europe; and since then numerous other lines have been laid by Great Britain, France, Russia, Germany, United States, Japan, and the Great Northern Telegraph Co. of Denmark, connecting the principal ports of China with each other and with the outside world.

The first land-line erected in China was a short line between Shanghai and Woosung built by foreign merchants in 1873. In 1875 Shêng Pao-chêng, Viceroy of Kiangsu, memorialized the throne advising the establishment of telegraphs, in place of the hitherto existing system of beacon signals, for rapid communication. Nothing, however, was done until 1879 when the viceroy, Li Hung-chang, obtained permission for the construction of a land-line between Tientsin and Taku. In the next year he arranged with the Great Northern Telegraph Co. for assistance in constructing a line from Tientsin to Shanghai, which was opened in 1881. Not a little difficulty was at first experienced in preventing the destruction of the lines by ignorant country folk. In 1882 Chinkiang and Nanking were linked up, and subsequently a line was carried along the Yangtse from Shanghai to Hankow. In 1884 Shanghai was joined up with Canton and Tientsin with Peking. In 1887 the Shanghai-Hankow line was extended into the western and south-western provinces. In 1894 lines were opened connecting the principal places in Sinkiang; and in 1897 the Peking-Kiakhta line across Mongolia opened the fastest route of communication between China and Europe. The chief towns of Manchuria were linked up in 1907.

From 1882 to 1908 all the Chinese land-lines were operated by a Chinese company under Government control; but in the latter year the Ministry of Communications took over all land-lines from the company and the Provincial Governments.

Telegraph conventions have been made with the four cable companies operating in China, viz. the Great Northern

Telegraph Co. of Denmark, the Eastern Extension, Australasia and China Telegraph Co. (British), the Commercial Pacific Cable Co. (American), and the Deutsch-Niederlandische Telegraphen Gesellschaft (German-Dutch); with Russia and Japan regarding the Manchurian system; with Japan regarding the cable between Dairen and Chefoo; with Germany regarding the German cables connecting Shanghai, Tsingtao, and Chefoo; with India and France regarding the connexion at the Burmese and Indo-Chinese frontiers.

At the end of 1913 the lines in operation throughout China and dependencies had a total length of 38,507 miles, including 1,002 miles of submarine cables and 102 miles of underground lines, with 612 telegraph stations. Fast-working Wheatstone instruments are being introduced all over the country, and schools for telegraphists have been established in several centres.

Length and dates of construction of principal lines:

Shanghai–Tientsin, 1,025 miles (1882); Shanghai–Canton, 1,820 miles (1882); Hankow–Luchow, 1,047 miles (1886); Sianfu–Peking, 964 miles (1890); Peking–Kiakhta, 1,061 miles (1897); Shanghai–Hankow, 873 miles (1884); Hankow–Peking, 974 miles (1910); Kiukiang–Canton, 988 miles (1884).

The rates at the end of 1913 were:

For telegrams in foreign languages: to places in the same province, 9 cents per word; between any two provinces, 18 cents per word; press telegrams (throughout China) 6 cents per word.

For telegrams in Chinese: to places in the same province, 6 cents per word; between any two provinces, 12 cents per word; press telegrams (throughout China), 3 cents per word.

Foreign telegrams: rate between China and Europe, with exception of Russia and the Caucasus, 3*s*. 6*d*. per word; press messages and deferred telegrams to most countries in Europe to be transmitted at half the ordinary rates.

Telegrams in European languages should be written in Roman characters. Those in Chinese are sent in a code composed of Arabic numerals which correspond to Chinese

characters. A book has been prepared containing about 7,000 characters, each having a corresponding number of four figures.

Wireless

The official list of wireless stations in China contains the following :

Name.	*Position (Meridian of Greenwich).*	*Day Range.*	*System.*	*Nature of Service.*
Chinese Stations :				
Canton . . .	23° 10′ N 113° 20′ E	650	Telefunken	Public.
Foochow . .	26° 07′ N 119° 18′ E	650	,,	,,
Kalgan . . .	40° 45′ N 115° 20′ E	650	,,	Official.
Peking . . .	39° 54′ N 116° 27′ E	650	,,	,,
Shanghai . .	31° 15′ N 121° 29′ E	200	,,	Public.
Woosung . .	31° 20′ N 121° 25′ E	650	,,	,,
Wuchang . .	30° 30′ N 114° 23′ E	650	,,	Official.
French Stations :				
Kwangchowwan .	21° 03′ 34″ N 110° 27′ 45″ E	500	French Government	Public and Official.
Shanghai (Sikawei).	31° 11′ 32″ N 121° 25′ 48″ E	500	Societé Française Radio-électrique	Public.
American stations :				
Peking . . .	39° 54′ 50″ N 116° 30′ 20″ E	150	U.S. Navy	Official.

The Chinese Government is erecting a chain of wireless stations along the coast of China, and proposes to extend the system to provincial capitals. The systems in use are the Telefunken and Marconi. The former is installed at Shanghai, Hanoi, Hoihow and Süwenyun, Tsingtau, Peking, Kalgan, and Canton, and contracts were made in 1913 for its establishment also at Swatow and Hankow. The coast stations have a day range of 650 to 700 miles, and a night range of about 1,300. Temporary rates for coast stations are 10 cents per word with a minimum charge of $1.

In addition to the foregoing places, the *China Year-book* for 1916 mentions wireless stations at Hu-mên (Fu-mun) at the entrance of the Canton River, Samshui, Paotingfu, Weihaiwei, Hongkong Dairen, and Port Arthur.

Besides the installation under the Colonial Post Office at Hongkong, there is a naval and military station on Stonecutters' Island.

There is a Marconi installation in the Italian Legation at Peking and in the Italian concession at Tientsin.

Telephones

The first Government telephone was constructed at Canton in 1903; and systems have been established in many places since and are under construction in many others. The following towns had exchanges in 1913: Shanghai, Hongkong, Tientsin, Peking, Dairen, Mukden, Hankow, Soochow, Tsingtau, Kiukiang, Sankiaopu, Harbin, Antung, Hangchow, Tsinan, and Taiyüanfu. There are private telephone systems at Hankow, Amoy, and Foochow.

TRANSLITERATION OF PLACE-NAMES

SEVERAL different systems are in current use for the romanization of Chinese. Each foreign country is naturally inclined to transcribe the sounds of the characters in conformity with its own spelling. Thus, the French would have ' tch ' where we write ' ch ', and ' ch ' for our ' sh '. The Morrison system, now almost obsolete, aimed at reproducing Chinese characters in a purely English form of spelling. Owing to our peculiar vowel-sounds, however, this system could hardly be adopted by other than Anglo-Saxon nations. The system of transliteration for Pekingese, known as the Wade orthography after the name of its inventor, may be regarded somewhat in the light of a compromise. In this, broadly speaking, it may be said that the vowels have their ordinary Continental values, while the semi-vowels (' w ' and ' y ') and the consonants are used more or less as in English. Hence we have *li*, not *le* or *lee*, and *wan* instead of *ouann*. All aspirates are indicated by an inverted comma : thus, *t'a*, pagoda, is distinguished from *ta*, great.

In the list of place-names compiled by the Chinese Post Office, which is likely to become the standard spelling, the local pronunciation is generally followed. For the sake of simplicity aspirates are omitted and no hyphens are used between the syllables. Names with the same sound are distinguished by adding either the province or the official status of the town. Thus, Taichow Ku (Kiangsu) is distinguished from Taichow Sha (Shansi) and Taichowfu in Chekiang ; Chüchow Sung (Shantung) from Chüchowfu in Chekiang ; and Taiping An (Anhwei) from numerous other towns of the same name, including Taipinghsien, also in Anhwei. According to this system the names of places at which different dialects are spoken may be found written in totally

different ways although the characters are identical: e. g. 'Hengkiang' in Kiangsi is the same in Chinese as 'Wong-kong' in Kwangtung.

In the present volume all place-names occurring in the Postal Guide have been written in the form there given. With regard to other names the Wade orthography has been adopted as far as possible; that is to say, wherever the Chinese characters are known, or the Wade form is obtainable from some trustworthy source. In these names the syllables are divided by hyphens.

NOTE

THERE are a number of dialects spoken along the coasts of South and Central China, and penetrating only a short distance inland ; they differ from one another in much the same way as the Romance languages of Southern Europe. Beginning from the north these dialects may be summarized under the districts

Shanghai,
Ningpo,
Wênchow,
Foochow,
Amoy-Swatow,
Cantonese and Hakka.

Throughout China north of the Yangtse and in all the hinterland of South China, that is to say in four-fifths of the country, the great dialect known as *kuan-hua* (official language) or ' mandarin ' is the current speech. There are a number of sub-dialects : Pekingese having been the accredited court speech of the Manchu dynasty became the standard form.

Of the coast dialects Shanghai and Cantonese have been chosen as the two most likely to be useful to British officers, and the standard Pekingese has been naturally selected to represent the mandarin section. Any one who can make himself understood easily in Pekingese has little difficulty in communicating with persons speaking the other sub-dialects.

VOCABULARIES

Transliterations, tone marks, and pronunciation of the three dialects—Mandarin, Shanghai, and Cantonese.

CHINESE being a non-alphabetic language the sounds of the characters have to be expressed by some system of transliteration which shall be intelligible to Europeans. Unfortunately, it has not been found possible to devise a uniform system that will serve for a number of different dialects. Each of the three dialects, therefore, included in the following vocabulary has been transcribed in the manner laid down by authorities in those dialects.

I. The Wade orthography, which has been adopted for the **Mandarin** dialect, may be said roughly to retain the English consonantal values combined with the ordinary Italian pronunciation of the vowels. The use of accents and diacritical marks is reduced to a minimum.

Too much importance can hardly be attached to the correct use of aspirates, marked by inverted commas (‘), and the same may be said of the four ‘tones’, keys in which the voice is pitched, which serve to differentiate words of the same sound. These are denoted by their respective numbers, placed at the right-hand top corner of the word.

Mandarin comprises a considerable number of sub-dialects, of which Pekingese, being the language of the capital, may be taken as the standard form, and likely to be of most service to the foreigner. The phraseology of this handbook, therefore, is in the Pekingese dialect, which, though differing in some degree from other varieties of Mandarin, will be generally understood throughout Northern and Central China.

II. For the **Shanghai** dialect the Union system of romanization, as agreed upon by the Shanghai Vernacular Society, is the only one as yet embodied in an English-Chinese dictionary. According to

this system, the vowels are pronounced for the most part in Continental fashion. Aspirates are indicated by an inverted comma, as in the Pekingese, or by the presence of an *h*. *F* is also aspirated. An apostrophe prefixed to a consonant shows that it is unaspirated, or pronounced with closed glottis and hardly any vibration of the larynx. A few peculiar sounds that may be noticed are the monosyllables *ng*, *m*, and *r*, with a slight vowel-sound before the consonant; *ts*, *dz*, *s*, and *z*, in which the vowel-sound is akin to Wade's *ŭ*; and the initials *ky*, which is not unlike unaspirated *ch*, but cannot well be represented by any English combination; and *hy*, which is something like *sh*, but less sibilant. It corresponds to Wade's *hs*. The Shanghai tones are four in number. A small semicircle to the left of a word indicates the rising tone; to the right, the departing tone. A final *h* or *k* indicates the entering tone; and all other words are in the even tone.

III. The **Cantonese** transliteration employed in the present handbook is based on the system devised by Sir William Jones for Oriental languages, as adapted by Dr. S. Wells Williams, with a few necessary corrections. Only eighteen of the letters of the English alphabet are required to represent the 800 different sounds of Cantonese speech, *b*, *d*, *j*, *q*, *r*, *v*, *x*, and *z* being unnecessary. Each of the five vowels (as well as the diphthongs) is divisible into long and short.

In a certain class of final particles, the *k* placed above the line, as in lo^k, is scarcely sounded. Aspirates and non-aspirates are sharply distinguished in Cantonese. Consonants which are never aspirated (e.g. *s*) should be pronounced more softly than in English. Each of the four tone-classes is subdivided into an upper and a lower series, with the difference of an octave in musical pitch between the upper even and lower even; moreover, a third entering tone has been added, midway in pitch between the other two, so that there are nine distinct tones in the Cantonese dialects; and besides these, there are certain 'variant' tones, confined to the colloquial and expressive of emphasis, emotion, &c.

An asterisk shows that the word is in a variant tone. A circle at the lower left-hand corner marks the variant of the upper even tone, thus: ₒ*sün*, a grandson.

More precise and detailed explanations regarding the pronunciation of all three dialects are given below.

MANDARIN (PEKINGESE)

Vowels and Diphthongs

a *a* in *father.*

ai like *aye.* The Italian *ai* in *hái.*

e *e* in *yet.*

ei *ey* in *grey.*

ê *u* in *sun.*

i singly, or as a final, *ee* in *tree*: in *ih, in, ing* shortened as in *chick, chin, thing.*

o generally as in *roll.* In the syllables *ho* (river) and *ko* or *k'o,* the vowel is most nearly the *ê* given above.

ou between *ow* in *tower* and *oe* in *toe.*

u singly, or as a final, the *oo* in *too*: in *un* and *ung* shortened as in the Italian *punto, lungo.*

ü the French *u* or German *ü.*

ŭ between the *i* in *lit* and the *u* in *shut.*

In other vowel combinations (diphthongs or triphthongs)—*ao, ia, iai, ie, io, iu, ua, uai, uei, ue, ui, uo, üa, üe*—the sounds are distinct: e.g. the *ie* is as in *siesta.*

Consonants

ch as in *chair.*

h as in the Scotch *loch.*

† hs To pronounce *hsing* drop the first *i* in *hissing*; the resultant *s* sound will approximate to the *hs* of Pekingese.

j like *z* in *brazier.*

† ng To produce this, *when it is an initial,* take the sounds in the French mo*n* *g*alant.

† rh in *êrh* is approximately the *r* sound in *burrow.*

† ss only found in *ssŭ.* The sound is between the *si* in *sin* and the *su* in *sun.*

† tz only found in *tzŭ* and *tz'ŭ.*

The rest of the consonants are as in English. The sounds marked † should be learnt from a native.

Aspirates

These are strong breathings between the initials *ch*, *k*, *p*, *t*, *ts*, and *tz* and the vowels following them. They are represented by inverted commas, and are very important in all dialects. It must be carefully remembered that a sound aspirated represents an entirely different word from the same sound unaspirated.

Tones

In the Pekingese dialect there are four. In this vocabulary they are denoted by numbers (1, 2, 3, and 4) attached to the romanized sound; in words or phrases of more than one character the tone numbers are attached to those sounds only which are essential.

The tones are of the first importance. They can only be learnt from a native.

SHANGHAI DIALECT

Vowels and Diphthongs

a	*a* in *father*.
au	*au* in *fraud*.
e	*e* in *prey*; in *eh* the *e* in *met*.
eu	nearly the *i* in *mirth*.
i	*i* in *caprice*; as an initial, the *i* in *view*; in *ing*, *ih* the *i* in *pit*.
o	*o* in *no*: in *ong* the sound is shorter.
oe	nearly the German *ö* or French *eu*.
oo	*oo* in *moon*.
u	nearly the *oo* in *foot*: in *ung*, *uh* the *u* in *sun*.
ui	is the French *u* or German *ü*.

In other vowel combinations—*ia*, *iau*, *ie*, *ieu*—the sounds are distinct: e.g. *ie* is as in *siesta*.

Single vowels followed by *k* retain their long sound; followed by *h* they are shortened.

Consonants

ch as in *chair*.
hy nearly the Pekingese *hs*.
hw *wh* in *where*.
j nearly the *j* in *jug*.
ky a difficult sound which might be better represented by *tky* or an unaspirated *ch*.
ng nearly as in *song*.

The rest of the consonants are pronounced generally as in English. The final *k* and *h* are NOT pronounced: they indicate that the vowel preceding is pronounced abruptly.

Aspirates

The initial vowels and consonants are divided into three series:

(1) the Higher, or Unaspirated;
(2) the Middle, or Aspirated; and
(3) the Lower, or slightly Aspirated.

The Higher series are *p*, *'m*, *'v*, *t*, *ts*, *s*, *'l*, *'n*, *'ny*, *'ng*, *k*, *ky*, *kw*, pure vowel-sounds, *i* and *'w*.

The Middle series are *p'*, *f*, *t'*, *ts'*, *k'*, *ch*, *kw'*, *h*, *hy*, and *hw*.

The Lower series are *b*, *m*, *v*, *d*, *dz*, *z*, *l*, *n*, *ny*, *ng*, *g*, *j*, *gw*, *y*, and *w*; and vowels with an inverted comma (') before them.

In the Middle series the breathings (aspirates) are strong; in the Lower series very slight.

Tones

There are four tones:

zang sung indicated by a ᶜ to the left of the word (ᶜ*zang*):
chui sung indicated by a ᵓ to the right of the word (*chui*ᵓ):
The final *h* or *k* indicates the *zeh sung* (*zeh*).
All other words are in the *bing sung*.

The tones can only be learnt from a native.

CANTONESE

Vowels and Diphthongs

a	*u* in *mutter*.
ai	*i* in *idle* pronounced quickly.
á	*a* in *father*.
ái	*ai* in *aisle*.
aú	*ow* in *how*.
áú	*ow* with a broader sound.
e	*e* in *pet*.
é	*ey* in *they*.
ei	*ay* in *pay*.
i	*i* in *pit*.
í	*i* in *machine*.
o	*o* in *wrong*.
ò	*o* in *home*.
ö	the German *ö*.
u	*u* in *bull*.
ú	*oo* in *fool*.
ü	the French *u* or German *ü*.

In other vowel combinations the sounds are distinct.

Consonants

ch	as in *chair*.
ng	as in *sing a song*: the initial sound is produced by dropping the *si* in *sing*.
sz	is the Pekingese *ssŭ*.
tsz	is the Pekingese *tzŭ*.

The rest of the consonants are generally as in English. In some words, called finals, used at the end of a phrase or sentence, the *k* placed above the line, as in lo^k, is scarcely sounded.

Aspirates

These occur in syllables beginning with *ch*, *k*, *p*, *t* and *ts*. They are represented by inverted commas.

Tones

The tones in Cantonese are more complicated than in Pekingese or the Shanghai dialect.

There are nine principal tones, divided into four classes:

1st Tone Class	Upper even tone	marked as in		ˍfu.
	Lower even tone	,,	,,	ˍfu.
2nd Tone Class	Upper rising tone	,,	,,	ˊfu.
	Lower rising tone	,,	,,	ˍfu.
3rd Tone Class	Upper receding tone	,,	,,	fu˃.
	Lower receding tone	,,	,,	fu˧.
4th Tone Class	Upper entering tone	,,	,,	chuk˃.
	Middle entering tone	,,	,,	chuk˳.
	Lower entering tone	,,	,,	chuk˧.

Besides the above nine tones there are 'variant' tones; these are marked by an asterisk. There is a circle at the position of the even tone marks to denote the variant of the upper even tone.

These explanations are given to elucidate the marks used in the vocabulary. The tones themselves can only be learnt from a native.

M. = **Mandarin**; *S.* = **Shanghai**; and *C.* = **Cantonese.**

VOCABULARIES

A is expressed by numeratives or classifiers, the commonest of which is

M. 一個 i² ko

S. 一个 ih kuh

C. 一個 yat, ko˒

Abacus

M. 算盤 suan⁴ p'an

S. „ „ soen˒-ben

C. „ „ sün˒ ˩p'ún

Abdomen

M. 肚子 tu⁴-tzŭ

S. 肚皮 ˂doo-bi

C. 肚 ˩t'ò

Able

M. 會 hui⁴; 能 nêng²; 能殼 nêng²-kou

S. (1) we˒; (2) nung; (3) nung-keu˒

C. (1) ˩wúi; (2) ˩nang

—— to do

M. 會做 hui⁴ tso⁴

S. „ „ we˒ tsoo˒

C. „ „ ˩wúi tsò²

Aboard

M. 在船上 tsai⁴ ch'uan² shang

S. 拉 „ „ la˒ zen laung˒

C. 在 „ „ tsoi² ˩shün shöng²

About

M. 上下 shang⁴ hsia⁴; 左右 tso³ yu⁴

S. (1) ˂zaung ˂au; (2) tsi˒ yeu˒

C. (1) shong² ha²*; (2) ˂tso yaú²

Above

M. 上 shang⁴; 上頭 shang⁴-t'ou; 在上面 tsai⁴ shang⁴ mien

S. (1) ˂zaung; (2) ˂zaung-deu; 拉上面 la˒ ˂zaung mien˒

C. 上高 shöng² ˩kò; 在上 ʦoi² shöng²

Abroad

M. 在外 tsai⁴ wai⁴

S. 外 nga˒

C. (1) tsoi² ngoi²

Abroad, to go

M. 出外 ch'u[1] wai[4]

S. „ 洋 ts'eh yang

C. 上外 ch'ut, ngoi[2]

Absence. *See* **Leave.**

Absent (not present)

M. 不在這兒 (*or* 這裏) pu[4] tsai[4] chê[4] 'rh (*or* chê[4]-li)

S. 勿垃拉 'veh leh-la˅; 不在 peh ᶜdze

C. 唔在 ˏm tsoi[2]; 唔係處 ˏm ᶜhai shü˅

—— **from home**

M. 不在家 pu[4] tsai[4] chia[1]

S. 出家 tseh kya

C. 唔在家 ˏm tsoi[2] ˳kà

Abuse (verb)

M. 罵 ma[4]; (ill-use) 妄用 wang[4] yung[4]

S. 罵人 mo˅ nyung

C. (1) má[2]; (ill-use) 薄待 pok˳ toi[2]

Abuse (noun)

M. 罵人的話 ma[4] jên[2] ti hua[4]

S. „ „ 格 „ mo˅ nyung kuh wo˅

C. „ „ 嘅說話 má[2] ˏyan ke˅ shüt˳ wá[2]

Accept

M. 受 shou[4]; 領收 ling[3] shou[1]

S. (1) ᶜzeu; 領 ᶜling; 收受 seu ᶜzeu

C. 收 ˏshaú

Accident

M. 意外 i[4] wai[4]; 偶然的事 ou[3]-jan[2] ti shih[4]

S. (1) i˅ nga˅; 偶然格事體 ᶜngeu-zen kuh z˅-ᶜt'i

C. (1) yí˅ ngoi[2]; 意外嘅事 yí˅ ngoi[2] ke˅ sz[2]

Accommodation

Have you any —— ?

M. 有房屋沒有 yu[3] fang[2] wu[1] mei[2] yu

S. 有勿有房間 ᶜyeu 'veh ᶜyeu vaung kan

C. 有地方俾 . . . 居住冇呀 ᶜyaú téi[2] ˏfong ᶜpéi . . . ˏkui chü[2] ᶜmò á[2]

Accurate

M. 不錯 pu[4] ts'o[4]; 正對 chêng[4] tui[4]; 準 chun[3]

S. 勿錯 'veh ts'o; 對个 te˅ kuh

C. 冇錯 ᶜmò ts'o˅; (3) ᶜchun

Action

M. 行爲 hsing[2] wei
S. „ „ ʿang-we
C. „ „ ˧hang wai[2]

—— (mil.)

M. 打仗 ta[3] chang[4]
S. „ „ ʿtang tsang˃
C. „ „ ʿtá chöng˃

Add

M. 加上 chia[1]-shang ; 添上 t'ien[1]-shang
S. (1) ka ; (2) t'ien
C. (1) ˧ká ; (2) ˧t'ím

—— up

M. 算起來 suan[4] ch'i lai
S. 加 „ „ ka ʿchi le
C. 踢埋 t'ek˳ ˧mái

Adjutant

M. 中軍 chung[1] chün[1]
S. „ „ tsong kyuin
C. „ „ ˧chung ˧kwan

Admiral

M. 水師提督 shui[3]-shih t'i[2]-tu
S. „ „ „ „ ʿsoe-s-di-tok
C. „ „ „ „ ʿshui ˧sz ˧t'ai tuk˳

Admit

M. 承認 ch'êng[2] jên[4]
S. „ „ dzung nyung˃
C. „ „ ˧shing ying[2]

Admit him

M. 准他進来 chun[3] t'a chin[4] lai
S. 讓伊進來 nyang˃ yi tsing˃-le
C. 俾佢入嚟 ʿpéi ˧k'ui yap˧ ˧lai

Advance

M. 往前去 wang[3] ch'ien[2] ch'ü[4]
S. „ „ „ ʿwaung zien chi˃
C. 前去 ˧ts'ín hui˃

Advantage

M. 益處 i[4]-ch'u; 好處 hao[3]-ch'u
S. (1) iuh-ts'u˃ ; (2) ʿhau-ts'u˃
C. 益 yik˳; 好處 ʿhò ch'ü˃

Aeroplane

M. 飛機 fei[1] chi[1]; 飛船 fei[1] ch'uan[2]
S. (1) fi kyi ; (2) fi zen
C. (1) ˧féi ˧kéi ; (2) ˧féi ˧shün

Afloat

M. 浮漂 fu[2] p'iao[4]
S. 漂 p'iau; 氽 'ts'ung; 浮 veu
C. 浮 ˧faú

Africa

M. 非洲 fei[1] chou[1]
S. „ „ 國 fi tseu kok
C. „ „ ˧féi ˧chaú

After

M. 後頭 hou⁴-t'ou; 後來 hou⁴-lai²

S. (1) ᶜ"eu deu; (2) ᶜ"eu le

C. 後 haú²

Afternoon

M. 後半天 hou⁴ pan t'ien

S. 下半日 ᶜ"au-pen⁾-nyih

C. 下晝 há² chaú⁾

Again

M. 再 tsai⁴; 又 yu⁴; 再一回 tsai⁴ i¹ hui²

S. (1) tse⁾; (2) yi⁾; (3) tse⁾ ih we

C. (1) tsoi⁾; (2) yaú²

Against

M. 相反 hsiang¹ fan³

S. ,, ,, siang-ᶜfan

C. ,, ,, ˌsöng ᶜfán

—— **(opposite)**

M. 對面 tui⁴ mien⁴

S. ,, ,, te⁾ mien⁾

C. ,, ,, tui⁾ mín²

To run ——

M. 撞著 chuang⁴ cho

S. ,, ,, dzaung⁾-dzak; 摒 bang⁾

C. 摒著 p'ung⁾ chökₒ

Age

M. 年紀 nien²-chi

S. ,, ,, nyien-kyi⁾

C. ,, ,, ˌnín ᶜkéi

Agree

M. 合 ho²; 對 tui⁴; 答應 ta¹-ying

S. (1) ᶜeh; (2) te⁾

C. (1) hop₂; (2) tui⁾

—— **with**

M. 合意 ho² i⁴

S. ,, ,, ᶜeh i⁾

C. ,, ,, hop₂ yi⁾

Ahead

M. 在前頭 tsai⁴ ch'ien²-t'ou

S. 拉 ,, ,, la⁾ zien-deu

C. 在 ,, ,, tsoi² ˌts'ín ˌt'aú

Aim (purpose)

M. 指向 chih³-hsiang⁴

S. 志 ,, ts⁾-hyang⁾

C. 指 ,, ᶜchí höng⁾; 志向 chí⁾ höng⁾

To take accurate —— (gun)

M. 描準 miao² chun³

S. 拿得定準頭 nau tuh ding⁾ ᶜtsung deu

C. 照準確的 chiú⁾ ᶜchun k'okₒ tikˌ

Air

M. 氣 ch'i⁴; (vb.) 曬一曬 shai⁴ i shai; 透風 t'ou⁴ fêng¹

S. (1) chi⁾; (vb.) (2) so⁾ ih so⁾; (3) t'eu⁾ fong

C. (1) héi⁾; (vb.) (3) t'aú⁾ ˌfung; 透氣 t'aú⁾ héi⁾

Alarm

M. 驚慌 ching⁴ huang
S. „ „ kyung waung
C. „ „ ˌking ˌfong

Alcohol

M. 酒精 chiu³ ching¹
S. „ „ tsieu tsing
C. „ „ ˈtsaú ˌtsing

Alike

M. 相同 hsiang¹ tˈung²; — 樣 i¹ yang⁴
S. (1) siang dong; (2) ih yang³; 像 ˈziang
C. (1) ˌsöng, ˌtˈung; (2) yat, yöng²

Alive

M. 活的 huo² ti; 活着 huo² cho
S. 活个 weh-kuh
C. 生 ˌsháng; 生活 ˌsháng wút,

He is still ——

M. 他還活着 tˈa¹ hai² huo² cho
S. 伊還活拉 yi wan weh la³
C. 佢重生 ˈkˈui chung² ˌsháng

All

M. 都 tou¹; 全 chˈüan²
S. 攏總 ˈlong ˈtsong; — 切 ih tsˈih
C. 喊 嚇 哈 hám² pá² láng²; 唒徒 sái³; 攏總 ˈlung ˈtsung

Allow

M. 准 chun³; 許 hsü³
S. „ ˈtsung; „ ˈhyui
C. „ ˈchun; 由得 ˌyaú tak,; 俾 ˈpéi

Ally (country)

M. 聯盟國 lien² mêng² kuo²
S. „ „ „ lien mung³ kok
C. „ „ „ ˌlün ˌmáng kwok,

Almost

M. 差不多 chˈa¹ pu to¹; 幾幾乎 chi¹-chi¹-hu¹
S. 差勿多 tsˈo-'veh-too; (2) ˈkyi-ˈkyi-ˈoo
C. (1) ˌchˈá pat, ˌto

Alone

M. 單 tan¹; 孤獨 ku¹ tu²
S. 單獨 tan dok; 獨千子 dok koen ˈts
C. (1) ˌtán; (2) ˌkwú tuk,

Along

M. 從 ts'ung²

S. „ dzong; 同 dong

C. (lengthwise) 揸 tím²; 直 chik₂; (with) 同 埋 ₍t'ung ₍mái

To take ——

M. 帶 去 tai⁴ ch'ü⁴

S. „ „ ta' chi'

C. „ 埋 tái' ₍mái

Alongside (shore)

M. 泊 岸 po⁴ an⁴

S. 傍 „ baung ngoen'

C. 在 „ 傍 tsoi² ngon² ₍p'ong

—— a ship

M. 靠 船 k'ao⁴ ch'uan²

S. „ „ k'au' zen

C. 拍 埋 船 邊 p'ák ₍mái ₍shün ₍pín

Aloud

M. 大 聲 ta⁴ shêng¹

S. „ „ doo' sang; 響 ᶜhyang

C. „ „ tái² ₍sheng †

Already

M. 已 經 i³-ching¹

S. „ „ ᶜi-kyung

C. „ „ ᶜyí ₍king

Also

M. 也 yeh³; 又 yu⁴

S. „ ᶜᵒa; „ ᶜyi; 還 wan

C. (2) yaú²; 亦 (係) yik₂ (hai²); 都 ₒtò

Although

M. 雖 然 sui¹-jan²

S. „ „ soe-zen; 雖 是 soe-'z

C. „ „ ₍sui ₍yín

Altogether

M. 一 齊 i¹ ch'i²; 通 共 t'ung¹ kung⁴

S. (1) ih zi

C. (1) yat₅ ₍ts'ai

Always

M. 常 常 ch'ang² ch'ang²

S. „ „ dzang-dzang

C. 時 時 ₍shí ₍shí; 常 時 ₍shöng ₍shí

He —— says

M. 他 老 說 t'a¹ lao³ shuo¹

S. 伊 常 話 yi dzang wo

C. 佢 時 時 話 ᶜk'ui ₍shi ₍shi wá²

Am. *See* phrases.

Ambulance (carriage)

M. 負 傷 車 fu⁴ shang¹ ch'ê¹

S. „ „ „ veu' saung ts'o

C. 病 „ 搬 peng²* ₍shöng ₍pún

Ambulance (corps)

M. 衛生隊 wei⁴ shêng¹ tui⁴
S. „ „ „ we' sung de'
C. 担架 „ ᶜch'e ká' tui²

Ambush

M. 埋伏 mai²-fu
S. „ „ ma-vok
C. „ „ ˌmái fuk₂

America

M. 美國 mei³ kuo
S. „ „ ᶜme kok
C. „ „ ᶜméi kwokₒ

Ammunition

M. 軍火 chün¹ huo³; 火藥彈子 huo³-yao tan⁴-tzŭ
S. (1) kyuin ᶜhoo; (2) ᶜhoo-yak dan-ts
C. (1) ˌkwan ᶜfo; (2) ᶜfo yök₂ tán² ᶜtsz

Among

M. 中間 chung¹-chien; 在裏頭 tsai⁴ li³-t'ou
S. 當中 taung tsong
C. 在 „ tsoi² ˌchung

Anchor

M. (s.) 錨 mao²; (vb.) 灣船 wan¹ ch'uan²; 停船 t'ing² ch'uan²
S. (s.) (1) mau; (vb.) (3) ding zen
C. (s.) (1) ˌnáú; (vb.) (2) ˌwán ˌshün; 灣泊 ˌwán pok₂

To drop ——

M. 下錨 hsia⁴ mao²
S. 拋 „ p'au mau
C. 下 „ há ˌnáú; 拋錨 ˌp'áú ˌnáú

At ——

M. 灣着 wan¹ cho
S. „ „ 'wan dzak
C. 碇泊 ting' pok₂

And

M. 並 ping⁴; 跟 kên; 和 ho², huo²
S. 咾 ᶜlau; 搭之 tah-ts
C. 同 ˌt'ung; 共 kung²; 兼 ˌkím; 又 yaú²

Angry

M. 發氣 fa¹ ch'i⁴; 怒氣 nu⁴ ch'i
S. 動氣 ᶜdong-chi'
C. 男嫋 ˌnaú; 怒 nò²

Don't be ——

M. 別生氣 pieh² shêng¹ ch'i⁴
S. 勿要生氣 'veh iau' sang chi'
C. 咪怒起嚟 ᶜmai nò² ᶜhéi ˌlai

Animal

M. 牲口 shêng¹-k'ou; 畜生 ch'u⁴-shêng

S. 中牲 tsong-sang; (1) sang-ˁk'eu

C. 禽獸 ˏk'am shaú˒; (2) ch'uk˳ ˏsháng†

—— **(quadruped)**

M. 走獸 tsou³ shou⁴

S. „ „ ˁtseu seu˒

C. „ „ ˁtsaú shaú˒

Ankle

M. 踝子骨 huai²-tzŭ ku³

S. „ 骨 koo-kweh

C. 脚眼 kök˳ ˁngán

Answer

M. 答應 ta¹-ying

S. 回答 we-tah

C. 答應 táp˳ ying˒ (or either alone)

—— **(letter)**

M. 回信 hui² hsin⁴

S. „ „ we-sing˒

C. „ „ ˏwúi-sun˒

Antidote

M. 解毒藥 chieh³ tu² yao⁴

S. „ „ „ ka˒ dok yak

C. „ „ „ ˏkái tuk˳ yök˳

Anvil

M. 鐵砧子 t'ieh³ chên¹-tzŭ

S. „ 墩 t'ih tung

C. 鐵砧 t'ít˳ ˏcham

Any. *See* phrases.

Anywhere

M. 不論何處 pu⁴ lun⁴ ho² ch'u⁴

S. 隨便那裏 dzoe-bien˒ ˁa li˒

C. 邊處都好 ˏpín shü˒ ˳tò ˁhò

Apology

M. 認錯的話 jên⁴-ts'o⁴-ti hua⁴; 賠不是 p'ei² pu²-shih

S. 認錯个話 nyung˒ ts'o kuh wo˒; 賠勿是 be 'veh ˁz

C. 說開 (*or* 認錯) 嘅話 shüt˳ ˏhoi (*or* ying² ts'o˒) ke˒ wá²*

Appear

M. 發現 fa¹ hsien⁴; 顯 hsien³

S. 出現 ts'eh yien˒; (2) hyien˒

C. 現出 yín² ch'ut˳; 出顯 chut˳ ˁhín

Appear to be right

M. 似乎不錯 ssŭ⁴-hu pu² ts'o⁴
S. „ „ 對个 ᶜz- ᶜoo te⁾ kuh
C. „ „ 不錯 ᶜts'z ˌwú pat̚ t ·o

Appoint

M. 派 p'ai⁴
S. „ p'a⁾
C. 設立 ch'it̚ₒ láp̚₂

—— **a day**

M. 定日子 ting⁴ jih⁴-tzŭ
S. „ „ „ ding⁾ nyih-ts
C. „ „ „ ting² yat̚₂ ᶜtsz

Approach

M. 近上來 chin⁴ shang lai²
S. „ „ „ ᶜjung ᶜzaung le
C. 埋嚟 ˌmái ˌlai ; 埋 ˌmái

April

M. 四月 ssŭ⁴ yüeh⁴
S. „ „ s⁾ nyoeh
C. 英四月 ˌying sz⁾ yüt̚₂

Arch

M. 檀門 hsüan⁴ mên²
S. 月洞 nyoeh dong⁾
C. 拱 ᶜkung

—— **(of bridge)**

M. 橋洞 ch'iao² tung⁴; 橋空 ch'iao² k'ung¹
S. (1) jau dong⁾
C. 橋拱 ˌk'íú ᶜkung

Arch (memorial)

M. 牌樓 p'ai²-lou
S. „ „ ba-leu
C. „ „ ˌp'ái ˌlaú

—— **(gateway)**

M. 甕洞兒 wêng⁴ tung 'rh
S. 門當 mung taung⁾
C. 門拱 ˌmún ᶜkung

Are. *See* phrases.

Arm

M. 肱臂 ko¹-pei
S. 臂膊 pi⁾-pok
C. 手 ᶜshaú

Armed

M. 備帶兵器 pei⁴ tai⁴ ping¹ ch'i
S. „ „ „ „ be⁾ ta⁾ ping-chi⁾
C. „ „ „ „ péi² tái⁾ ˌping héi⁾

Armour

M. 甲 chia³; 盔甲 k'uei¹ chia³
S. „ kah
C. „ káp̚ₒ ; (2) ˌk'wai káp̚ₒ

Arms

M. 兵器 ping¹ ch'i ; 軍器 chün¹ ch'i⁴
S. (1) ping-chi⁾
C. (1) ˌping héi⁾; (2) ˌkwan héi⁾

Army

M. 兵 ping[1]; 軍 chün[1]; 陸軍 lu[4] chün[1]

S. (1) ping; (2) kyuin

C. (1) ˌping; (2) ˌkwan; (3) luk$_2$ ˌkwan

—— **corps**

M. 軍 chün[1]

S. „ 團 kyuin doen

C. „ „ ˌkwan ˏt'ün

Arrange

M. 辦 pan[4]; 擺 pai[3]; 安排 an[1] p'ai[2]

S. (1) ban˃; (3) oen-ba

C. (in order) 排開 ˏp'ai* ˇhoi; (a matter) 辦妥 pán[2] ˏt'o

Arrest

M. 拿 na[2]; 捉拿 cho[1] na[2]

S. „ nau; „ „ tsauh nau

C. 拉 ˌlái

Arrive

M. 到 tao[4]; 來到 lai[2] tao[4]

S. „ tau˃

C. „ tò˃; 嚟到 ˏlái tò˃

Arsenal

M. 軍器局 chün[1] ch'i chü[2]

S. „ „ „ kyuin chi˃ jok

C. „ „ „ ˌkwan héi˃ kuk$_2$

Artery

M. 血管子 hsieh[3] kuan[3]-tzŭ

S. „ 脈 hyoeh mak

C. „ „ 管 hüt$_o$ mak$_2$ ˇkwún

Article

M. 東西 tung[1]-hsi; 物件 wu[4] chien[4]

S. 物事 veh z˃

C. „ mat$_2$; (2) mat$_2$ kín[2]*

Artillery

M. 炮 p'ao[4]

S. „ p'au˃

C. „ p'áú˃

As

M. 如 ju[2]
S. „ zu
C. 卽如 tsik$_2$ ˏyü

} (see phrases)

Ascent (road)

M. 上坡兒 shang[4] p'o[1] 'rh

S. „ „ ˇzaung p'oo

C. „ 去嘅路 ˏshöng hui˃ ke˃ lò[2]

Ashes

M. 灰 hui[1]; 火灰 huo[3]-hui[1]

S. „ hwe; „ „ ˇhoo hwe

C. „ ˌfui; „ „ ˇfo ˌfui

Ashore

M. 岸上 an[4] shang

S. 拉岸上 la˃ ngoen˃ laung˃

C. 岸上 ngon[2] shöng[2]

Ashore, go

M. 上岸 shang^{4} an^{4}
S. „ „ ᶜzaung ngoenˀ
C. „ „ ᶜshöng ngonˀ

Asia

M. 亞洲 ya^{4} chou^{1}; 亞西亞 ya^{4}-hsi-ya^{4}
S. (1) ya tseu
C. (1) áˀ ˌchaú; (2) áˀ ˌsai áˀ

Ask (enquire)

M. 問 wên^{4}; 打聽 ta^{3}-tᶜing
S. „ mungˀ; „ „ ᶜtang-tᶜingˀ
C. „ manˀ

—— **(beg)**

M. 求 chᶜiu^{2}
S. „ jeu
C. „ ˏkᶜaú

Ass

M. 驢 lü^{2}
S. „ 子 li-ᶜts
C. „ ˏlui

Assault

M. 打 ta^{3}; 攻擊 kung^{1} chi^{1}
S. „ ᶜtang; 攻打 kong-ᶜtang
C. „ ᶜtá

Astray

M. 走錯了 tsou^{3} tsᶜo^{4} lo
S. „ „ ᶜtseu tsᶜo
C. 失路 shatˌ lòˀ; 蕩失 tongˀ shatˌ

At

M. 在 tsai^{4}; 於 yüˀ (see phrases)
S. „ ᶜdze; 垃拉 leh-laˀ
C. „ tsoiˀ; 喺 ᶜhai

At least

M. 至少 chih^{4} shao^{3}
S. „ „ tsˀ ᶜsau
C. „ „ chíˀ ᶜsíú

At most

M. 至多 chih^{4} to^{1}
S. „ „ tsˀ-too
C. „ „ chíˀ ˌto

At once

M. 立刻 li^{4}-kᶜo^{4}
S. „ „ lih-kᶜuh
C. 卽 „ tsikˌ hakˌ

Attach

M. 聯合 lienˀ hoˀ
S. 連攏 lien-ᶜlong
C. 相連 ˌsöng ˏlín

—— **(stick)**

M. 貼 tᶜiehˀ
S. „ tᶜih
C. „ tᶜípₒ; 黏 ˌchᶜí

Attack

M. 攻打 kung^{1} ta^{3}
S. „ „ kong-ᶜtang
C. „ „ ˌkung ᶜtá; ᶜtá

Attempt, make an

M. 試 一 試 shih⁴ i¹ shih⁴
S. „ „ 回 看 sʾ ih we k'oenʾ
C. „ „ 試 shíʾ yat, shíʾ

Attend (person)

M. 伏 侍 fu²- shih; 伺 候 tz'ŭ⁴-hou
S. 服 侍 vok-zʾ
C. „ „ fuk₂ shi²; 服 事 fuk₂ sz²

—— (care)

M. 理 li³; 用 心 yung⁴ hsin¹
S. „ ᶜli; „ „ yongʾ-sing
C. „ ᶢléi; 打 理 ᶜtá ᶢléi

August.

M. 八 月 pa¹ yüeh⁴
S. „ „ pah nyoeh
C. 英 八 月 ᶜying pát₀ yüt₂

Austria

M. 奧 國 ao⁴ kuo
S. „ „ ao kok
C. „ „ òʾ kwok₀

Autumn

M. 秋 ch'iu¹; 秋 天 ch'iu¹ t'ien¹
S. (1) ts'ieu; (2) ts'ieu t'ien
C. (1) ᶜts'aú; (2) ᶜts'aú ᶜt'ín

Avenge

M. 報 仇 pao⁴ ch'ou²
S. „ „ pauʾ-dzeu
C. „ „ pòʾ ᶜch'aú

Avoid

M. 躲 避 to³ pi⁴; 免 mien³
S. „ „ ᶜtoo-biʾ; „ 脫 ᶜmien t'eh
C. 避 péi²; 避 住 péi² chü²

Awake

M. 醒 着 hsing³ cho
S. „ „ ᶜsing dzak
C. „ ᶜseng†

Away

Go ——

M. 去 罷 ch'ü⁴ pa
S. „ „ chiʾ-ᶜba
C. „ „ 咯 huiʾ pá² lok₀

Gone ——

M. 去 了 ch'ü⁴ lo
S. „ 哉 chiʾ-tse
C. „ 阻 huiʾ* ᶜcho

Awful

M. 利 害 li⁴ hai; 可 怕 的 k'o³ p'a⁴ ti
S. 可 怕 个 ᶜk'au p'oʾ kuh
C. „ 畏 ᶜho waiʾ

Axe

M. 斧 子 fu³-tzŭ
S. „ 頭 ᶜfoo-deu
C. „ „ ᶜfú ᶢt'aú*

Axle

M. (1) 軸子 chou²-tzŭ ;
(2) 車軸 ch'ê⁴ chou²
S. (1) jok-ᶜts
C. (2) ᶜch'e chuk₂*

Back

M. 背 pei⁴
S. „ peᶟ
C. „ púiᶟ

Come ——

M. 回來 hui² lai
S. „ „ we le
C. 翻嚟 ᶜfán ᶜlai

Go ——

M. 回去 hui² ch'ü⁴
S. „ „ we chiᶟ
C. 翻 „ ᶜfán huiᶟ

—— door

M. 後門 hou⁴ mên²
S. „ „ ᶜ"eu-mung
C. „ „ haú² ᶜmún

Bacon

M. 薰猪肉 hsün¹ chu¹ jou⁴
S. „ „ „ hyuin ts-nyok
C. 烟 „ „ ᶜyín ᶜchü yuk₂

Bad

M. 不好 pu⁴ hao³
S. 勿 „ 'veh ᶜhau; 忡休 cheu
C. 唔 „ ᶜm ᶜhò

Badge

M. 號 hao⁴; 號頭兒 hao⁴ t'ou² 'rh
S. „ 'auᶟ
C. 記號 kéiᶟ hòᶟ

Baggage

M. 行李 hsing²-li
S. „ „ ᶜang-ᶜli
C. „ „ ᶜhang ᶜléi

Bake

M. 烤 k'ao³; 烘 hung¹; 燒 shao¹
S. (2) hong ; (3) sau
C. 局 kuk₂

Balance

M. 餘剩 yü² shêng⁴; 盈餘 ying² yü²; 敷餘 fu⁴ yü
S. 找頭 ᶜtsau-deu ; 餘下 yui ᶜ"au
C. (1) ᶜyü shing²

—— (money)

M. 存欵 ts'un² k'uan³
S. „ „ dzung-ᶜkw'en
C. 數尾 shòᶟ ᶜméi

Bale

M. 包兒 pao¹ 'rh ; 疋 p'i²; (vb.) 舀水 yao³ (*or* k'uai³) shui³
S. 包 pau ; (2) pi ; (vb.) ᶜyau ᶜs
C. „ ᶜpáu ; (vb.) 戽水 fúᶟ ᶜshui

Ball

M. 球 ch'iu²
S. ,, jeu
C. ,, ˩k'aú

Ballast

M. 壓載 ya¹ tsai³
S. ,, 船个物事 ah zen kuh meh-z'
C. 責載 chák˳ tsoi²*

Balloon

M. 汽球 ch'i⁴ ch'iu²; 輕氣球 ch'ing¹ ch'i⁴ ch'iu²
S. (1) chi'-jeu
C. (1) héi' ˩k'aú; (2) ˧heng† héi' ˩k'aú

Bamboo

M. 竹子 chu²-tzŭ; 竹竿 chu² kan¹
S. (1) tsok; 竹頭 tsok-deu
C. (1) chuk˩

Bandage

M. (s.) 裹布 kuo³ pu⁴; (vb.) 裹 kuo³; 纏 ch'an³
S. (s.) ˁkoo poo'; (vb.) ˁkoo; dzen'
C. (s.) 布帶 pò' tái'; (vb.) (3) chín²

Bang (noise)

M. 轟聲 hung¹ shêng¹
S. 嘭彭聲 bang' sang
C. 嘭棒聲 ˧p'áng ˧sheng†

Bank

—— (slope)

M. 坡 p'o¹; 隄 ti¹
S. ,, p'oo; ,, tih
C. 斜下嘅地 ˩ts'e há² ke' téi²

—— (river)

M. 河岸 ho² an⁴
S. ,, ,, ˁoo ngoen'
C. ,, ,, ˩ho ngon²; 河邊 ˩ho ˳pín

—— (money)

M. 銀行 yin² hang²
S. ,, ,, nyung-ˁaung
C. ,, ,, ˩ngan ˧hong*

—— -note

M. 銀票 yin² p'iao⁴
S. ,, ,, nyung-p'iau'
C. ,, 紙 ˩ngan ˁchí

Banners

M. 旗 ch'i²
S. ,, ji
C. ,, ˩k'éi; 標 ˧píú

The eight Manchu ——

M. 八旗 pa¹ ch'i²
S. ,, ,, pah ji
C. ,, ,, pát˳ ˩k'éi

Barber

M. 剃頭的 t'i⁴ t'ou² ti
S. ,, ,, 个 t'i'-deu kuh
C. ,, ,, 佬 t'ai' ˩t'aú ˥lò; 翦髮佬 ˁtsín fát˳ ˥lò

Barley

M. 大麥 ta⁴ mai⁴
S. ,, ,, da'-mak
C. ,, ,, tái² mak₂

Barracks

M. 兵營 ping¹ ying²; 營盤 ying² p'an
S. (1) ping yung; (2) yung ben
C. 兵房 ˌping ˌfong*

Barrel

M. 桶子 t'ung³-tzŭ
S. ,, ˋdong
C. 琵琶桶 ˌp'éi ˌp'á ˋt'ung

Barricade

M. 寨欄 chai⁴ lan²; 柵欄 cha⁴ lan²
S. (2) sah-lah
C. (2) ch'ák₅ ˌlán

Base (mil.)

M. 大本營 ta⁴ pên³ ying²
S. ,, ,, ,, doo' ˋpung yung
C. ,, ,, ,, tái² ˋpún ˌying

—— **(naval)**

M. 海軍營 hai³ chün¹ ying²
S. ,, ,, ,, ˋhe kyuin yung
C. ,, ,, ,, ˋhoi ˌkwan ˌying

Basin

M. 盆 p'ên²
S. ,, bung
C. ,, ˌp'ún

Basket (with handle)

M. 籃子 lan²-tzŭ
S. ,, lan
C. 笠 lap₅; 藺 ₒléi; 籃 ˌlám*

Bath

M. 洗澡盆 hsi³ tsao³ p'ên²
S. 浴盆 yok bung
C. 洗身桶 ˋsai ˌshan ˋt'ung

—— **(to bathe)**

M. 洗澡 hsi³ tsao³
S. 淨浴 zing'-yok
C. 洗身 ˋsai ˌshan

Battalion

M. 營 ying²; 一隊步兵 i tui⁴ pu⁴ ping¹
S. (1) yung; (2) ih de' boo' ping
C. 旅團 ˧lui ˌt'ün

Battery (artillery)

M. 炮隊 p'ao⁴ tui⁴
S. ,, ,, p'au' de'
C. ,, ,, p'áú' tui²

Battle

M. 戰 chan⁴
S. ,, tsen'
C. ,, 鬥 chín' taú'

To fight a ——

M. 打仗 ta³ chang⁴; 打戰 ta³ chan⁴
S. (1) ˋtang-tsang'; (2) ˋtang-tsen'
C. (2) ˋtà chín'

Battle, to lose a

M. 打敗仗 ta^{3} pai^{4} chang^{4}
S. ,, ,, ,, ʿtang ba˃ tsang˃
C. ,, ,, ,, ʿta pái^{2} chöng^{2}

To win a ——

M. 打勝仗 ta^{3} shêng^{4} chang^{4}
S. ,, ,, ,, ʿtang sung˃ tsang˃
C. ,, ,, ,, ʿtá ˏshing chöng^{2}

Battle-field

M. 戰場 chan^{4} chʿang^{3}
S. ,, ,, tsen˃-dzang
C. ,, ,, chín˃ ˏchʿöng

Battle-ship

M. 軍艦 chün^{1} hsien^{4}; 鐵甲船 tʿieh^{3} chia^{3} chʿuan^{2}
S. (1) kyuin chien; (2) tʿih kah sen
C. (1) ˏkwan lám^{2}; 戰艦 chín˃ lám^{2}; (2) tʿít$_{o}$ káp$_{o}$ ˏshün

Bay

M. 海灣子 hai^{3} wan^{1}-tzŭ
S. ,, ,, ʿhae-'wan
C. (海)灣 (ʿhoi) ˏwán; 澳 ò˃

Bayonet

M. 槍刺 chʿiang^{1} tzʿŭ^{4}
S. ,, ,, tsʿiang tsʿ˃; 槍頭刀 tsʿiang-deu tau
C. 鎗頭劍 (or 刀) $_{o}$tsʿöng ˏtʿaú kím˃ (*or* ˏtò)

Be (vb.). *See* phrases.

Beach

M. 灘 tʿan^{1}; 海邊 hai^{3} pien^{1}
S. ,, tʿan; ,, ,, ʿhe pien
C. (2) ʿhoi $_{o}$pín

Beacon (light)

M. 燈杆子 têng^{1} kan^{4}-tzŭ
S. ,, ,, tung ʿkoen
C. ,, ,, ˏtang ˏkon

—— **(smoke)**

M. 烟墩 yen^{1} tun^{1}
S. ,, ,, ien tung
C. ,, ,, ˏyín ˏtun

Beans

M. 豆子 tou^{4}-tzŭ
S. ,, ,, deu˃-ʿts
C. ,, taú^{2}*

—— **(broad beans)**

M. 蠶豆 tsʿan^{2} tou^{4}
S. ,, ,, zen deu˃
C. 豆角 taú^{2} kok$_{o}$

—— **(French beans)**

M. 扁豆 pien^{3} tou^{4}
S. ,, ,, ʿpien deu˃
C. 邊 ,, ˏpín taú^{2}*

Bear (vb.)

M. 忍 jên^{3}; 耐 nai^{4}
S. ,, ʿnyung; 忍耐 ʿnyung ne˃
C. ,, ʿyan; 抵(得)ʿtai (tak$_{5}$)

Bear on the shoulders

M. 挑 t'iao[1]; 担 tan[1]
S. 掮 jien
C. 托 t'ok。

—— on the head

M. 載 tai[4]
S. 頂 ᶜting
C. 托 t'ok。; 頂 ᶜting

Hard to ——

M. 難受 nan[2]-shou[4]
S. ,, ,, nan ᶜzeu
C. ,, 抵得住 ˌnán ᶜtai tak˺ chü[2]

To —— hardship

M. 受難 shou[4] nan[2]
S. ,, ,, ᶜzeu nan
C. ,, ,, shaú[2] ˌnán

Unable to ——

M. 担當不住 tan[1] tang[1] pu chu[4]; 忍不住 jên[3] pu chu[4]
S. 担當勿起 tan-taung ʾveh ᶜchi
C. 唔抵得住 ˌm ᶜtai tak˺ chü[2]

—— in mind

M. 留在心上 liu[2] tsai hsin[1] shang
S. 留在心裡 lieu ᶜdze sing ᶜli
C. 記在心 kéi˺ tsoi[2] ˌsam

Bear (animal)

M. 熊 hsiung[1]
S. ,, yong
C. ,, (人) ˌchung (ˌyan *)

Beard

M. 鬍子 hu[2]-tzŭ ᶜ
S. 鬚 soo
C. ,, ˌsò

Beat

M. 打 ta[3]
S. ,, ᶜtang
C ,, ᶜtá

Beautiful

M. 好看 hao[3] k'an[4]
S. ,, ,, ᶜhau k'oen˺; 趣 ts'ui˺
C. 好睇 ᶜhò ᶜt'ai

Because

M. 因爲 yin[1]-wei
S. ,, ,, iung we˺
C. ,, ,, ˌyan wái[2]

Become

M. 成 ch'êng[2]
S. ,, dzung
C. ,, ˌshing

Bed

M. 牀 ch'uang[2]
S. ,, zaung
C. ,, ˌch'ong

Bed (stove-bed)

M. 炕 k'ang⁴
S. „ k'ong
C. „ 牀 hong² ˩ch'ong

Bedroom

M. 睡覺的屋子 shui⁴ chiao⁴ ti wu¹-tzŭ ; 卧房 wo⁴ fang²
S. (2) ngoo² vaung
C. 睏訓房 fan² ˩fong*

Beef

M. 牛肉 niu² jou
S. „ „ nyeu nyok
C. „ „ ˩ngaú yuk₂

Beer

M. 大麥酒 ta⁴ mai⁴ chiu³; 皮酒 p'i² chiu³
S. (1) da²-mak ˈtsieu ; (2) bi-ˈtsieu
C. (2) ₀pe ˈtsaú

Before (time and place)

M. 前 ch'ien²; 先 hsien¹
S. (1) zien ; (2) sien
C. (1) ˩ts'ín ; (time) 先 ˩sín

As ——

M. 照舊 chao⁴ chiu⁴
S. „ 常 tsau² dzang
C. „ 舊 chíú² kaú²

—— long

M. 不久 pu chiu³
S. 勿久 'veh ˈkyeu
C. 冇耐 ˩mò noi²*

Beforehand

M. 預先 yü⁴ hsien¹
S. „ „ yui² sien
C. „ „ yü² ˩sín

Begin

M. 動手 tung⁴ shou³; 起頭 ch'i³ t'ou²
S. (2) ˈchi deu
C. 開手 ˩hoi ˈshau ; (2) ˈhéi ˩t'aú

—— speaking

M. 開口 k'ai¹ k'ou³
S. „ „ k'e ˈk'eu
C. „ „ 嚟講 ˩hoi ˈhaú ˩lai ˈkong

—— work

M. 開工 k'ai¹ kung¹
S. 動 „ ˈdong kong
C. 開 „ ˩hoi ˩kung

Beginning

M. 起頭兒 ch'i³ t'ou² 'rh
S. „ „ ˈchi deu ; 頭 deu
C. 始初 ˈch'í ₀ch'o

Behind

M. 後頭 hou⁴-t'ou ; 後面 hou⁴ mien⁴
S. (1) ˈ"eu deu ; (2) ˈ"eu mien
C. 後便 haú² pín²

Belgium

M. 比國 pi³ kuo
S. „ „ ʿpi kok
C. „ „ ʿpéi kwok꜀

Believe

M. 信 hsin⁴; 相信 hsiang¹ hsin⁴
S. (1) sing⁵; (2) siang sing⁵
C. (1) sun⁵

Bell

M. 鐘 chung¹; 鈴鐺 ling² tang
S. (1) tsong; (2) ling
C. (1) ꜀chung; (a small hand-bell) 鈴仔 ꜀ling ʿtsai

—— **tower**

M. 鐘樓 chung¹ lou²
S. „ „ tsong leu
C. „ „ ꜀chung ꜂laú*

Belong

M. 屬 shu³
S. „ zok
C. „ shuk₂

Below

M. 下 hsia⁴; 底下 ti³ hsia
S. „ ʿʿau; „ „ ti ʿʿau
C. „ 底 há² ʿtai (*or* ꜀tai)

Belt

M. 帶子 tai⁴-tzŭ
S. „ „ ta⁵ ʿts
C. „ tái⁵

Belt, sword

M. 刀帶 tao¹ tai⁴
S. „ „ tau ta⁵
C. 劍 „ kím⁵ tái⁵

Bench

M. 板凳 pan³ têng
S. „ „ ʿpan tung⁵
C. 凳 tang⁵

Bend

M. 彎曲 wan¹ chʿü¹; (river) 彎 wan¹; (vb.) 彎過來 wan¹ kuo lai
S. (1) ʾwan chok; (2) ʾwan; (vb.) (3) ʾwan koo⁵ le
C. (1) ꜀wán kʿuk₅; (river) 河灣 ꜂ho ꜀wán; (vb.) 屈曲 wat₅ kʿuk꜀

To —— the body

M. 屈身 chʿü¹ shên¹
S. 曲 „ chok sung
C. 屈 „ wat₅ ꜀shan

Beneath

M. 底下 ti³-hsia; 在下邊 tsai⁴ hsia⁴ pien
S. (1) ʿti ʿʿau; (2) ʿdze ʿʿau pien
C. (1) ʿtai há²

Benefit

M. 益處 i⁴ chʿu; 利 li⁴
S. (1) iuh tsʿu⁵; 利益 li⁵ iuh
C. (1) yik₅ (chʿü⁵)

Berry

M. 子兒 tzŭ³ 'rh

S. 仔仔 ʿts ʿts

C. 小菓 ʿsíú ʿkwo; 珠菓 ˌchü ʿkwo

Berth (ship)

M. 泊所 po⁴ so³; 泊船的地方 po⁴ chʿuan²-ti ti⁴-fang

S. 停船个地方 ding sen kuh diˀ-faung

C. 泊船之地 pokˌ ˌshün ˌchí téi²

—— **(employment)**

M. 事業 shih⁴ yeh⁴

S. ,, ,, zˀ nyih

C. ,, ,, szˀ yípₒ

Beside

M. 旁邊 pʿang² pien¹; 在旁 tsai⁴ pʿang²

S. (1) baung pien; (2) ʿdze baung

C. 側邊 chakˌ ˌpín

Besides

M. 另外 ling⁴ wai⁴

S. ,, ,, lingˀ ngaˀ

C. ,, ,, ling² ngoi²

—— **this**

M. 除此還有 chʿu² tzʿŭ³ hai² yu³

S. ,, ,, 以外 dzu ʿtsʿ ʿi ngaˀ

C. 除此之外 ˌchʿü ʿtsʿz ˌchí ngoi²

Besiege

M. 攻圍 kung¹ wei²

S. 圍困 we kwʿungˀ

C. 攻圍 ˌkung ˌwai

Best

M. 最好 tsui⁴ hao³; 頂好 ting³ hao³

S. (1) tsoeˀ ʿhau; (2) ʿting ʿhau

C. 至好 chíˀ ʿhò; (2) ʿting ʿhò

—— **quality**

M. 第一品 ti⁴ i¹ pʿin³

S. 頭品 deu ʿpʿing

C. 上上等(質) shöng² shöng² ʿtang (chatˌ)

Betray (secret)

M. 洩漏 hsieh⁴ lou⁴

S. ,, ,, sih leuˀ

C. ,, ,, sítₒ laú²; 敗露 pái² lò²

—— **(treachery)**

M. 欺陷 chʿi¹ hsien⁴; 失信 shih¹ hsin⁴

S. (2) seh singˀ

C. (1) ˌhéi hám²; (2) shutˌ sunˀ

Better

M. 更好 kêng¹ hao³

S. 好一顏 ʿhau ih 'ngan

C. 更好 kangˀ ʿhò

Better, a little

M. 好些 hao³ hsieh¹
S. „ 點 ʿhau tien
C. „ 啲的 ʿhò ˏti

—— **than that**

M. 比那個强 pi³ na⁴-ko ch'iang²
S. 比伊个好 ʿpi i-kuh ʿhau
C. 重好過個啲的 chung² ʿhò kwoˀ koˀ ˏti

Between

M. 中間 chung¹ chien¹
S. „ „ tsong kan
C. „ „ ˏchung ˏkán

Beverage

M. 喝的 ho¹ ti
S. „ 个 k'oeh kuh
C. 所飲之物 ʿsho ʿyam ˏchí mat₂

Beware

M. 戒 chieh⁴; 謹愼 chin³ shên⁴; 隄防 ti¹ fang
S. (2) ʿkyung zungˀ; 留神 lieu zung; 小心 ʿsiau sing
C. 提防 ˏt'ai ˏfong

Beware of the dog

M. 小心狗 hsiao³ hsin¹ kou³
S. 留 „ „ lieu sing ʿkeu
C. 提防惡狗 ˏt'ai ˏfong ok˳ ʿkaú

Beyond

M. 外頭 wai⁴-t'ou; 以外 i³ wai⁴
S. (1) ngaˀ deu
C. 之外 ˏchí ngoi²; 在外 tsoi² ngoi²

—— **the frontier**

M. 邊外 pien¹ wai⁴
S. „ „ pienˀ ngaˀ
C. 口外 ʿhaú ngoi²; 口岸之外 ʿhaú ngon² ˏchí ngoi²

—— **the time**

M. 過了時候 kuo⁴ lo shih²-hou
S. „ 時 kooˀ z
C. „ „ 候 kwoˀ ˏshí haú²

Bicycle

M. 脚踏車 chiao³ t'a⁴ ch'ê¹
S. „ „ „ kyak dah t'so
C. „ 車 kök˳ ˳ch'e; 單車 ˳tán ˳ch'e

Big

M. 大 ta⁴
S. „ dooˀ
C. „ tái²

Bigger

M. 大一點兒 ta^{4} i tie(n)^{3} 'rh; 更大 kêng^{1} ta^{4}

S. 大一顏 doo^{5} ih 'ngan

C. (2) kang^{5} tái^{2}; (a little) 大啲的 tái^{2} $_{o}$ti

Biggest

M. 最大 tsui^{4} ta^{4}; 頂大的 ting^{3} ta^{4} ti

S. 頂大 ^{c}ting doo^{5}; 頂大个 ^{c}ting doo^{5} kuh

C. 至大 chí^{5} tái^{2}

Bill

M. 賬 chang^{4}

S. ,, tsang^{5}

C. 單 $_{o}$tán

—— **of exchange**

M. 滙票 hui^{4} p'iao^{4}

S. ,, ,, we^{5} p'iau^{5}

C. ,, 單 wui^{2} $_{o}$tán

—— **of lading**

M. 載貨單 tsai^{3} huo^{4} tan^{1}

S. ,, ,, ,, tse^{5} hoo^{5} tan

C. 攬載紙 ^{s}lám tsoi^{5} ^{c}chi

Billet

M. 下處 hsia^{4} ch'u^{4}; 歇宿之所 hsieh^{1} su^{4} chih^{1} so^{3}

S. (1) ^{c}'au ts'u^{5}

C. 微發宿舍 $_{s}$méi fát$_{o}$ suk$_{o}$ ^{c}she

Bind

M. 綁起來 pang^{3} ch'i lai; 捆 k'un^{3}

S. (1) ^{c}paung ^{c}chi le; (2) ^{c}k'wung

C. 綁 ^{c}pong; (as straw, &c.) 札埋 chát$_{o}$ $_{s}$mái

—— **the head**

M. 包頭 pao^{1} t'ou^{2}

S. ,, ,, pau deu

C. ,, ,, $_{c}$páú $_{s}$t'aú

Bird

M. 鳥兒 niao^{3} 'rh

S. 窩 ^{c}tiau

C. 雀 tsök$_{o}$; 雀鳥 tsök$_{o}$ ^{s}níú

Bit. A ——

M. 一塊 i^{1} k'uai^{4}; 一點兒 i^{1} t'ie(n)^{3} 'rh

S. (1) ih kw'e^{5}; 一點點 ih tien tien

C. 一塊 yat$_{5}$ fái^{5}; 一啲 yat$_{5}$ $_{o}$tí; 啲啲多 $_{c}$tí kom^{5} $_{o}$to

—— **(horse's)**

M. 嚼子 chiao^{2}-tzŭ

S. ,, ,, ziah ^{c}ts

C. 馬口鉗 ^{s}má ^{c}haú $_{s}$k'ím

Bite

M. 咬 yao^{3}

S. ,, ^{c}ngau

C. ,, ^{s}ngáú

Bitter

M. 苦 k'u³
S. „ ʿk'oo
C. „ ʿfú

Black

M. 黑 hei¹
S. „ huh
C. „ hak˩

Blacksmith

M. 鐵匠 t'ieh³ chiang
S. „ „ t'ih ziang˒
C. 打鐵佬 ʿtá t'ít˳ ˩lò

Blame (vb.)

M. 怪 kuai⁴; 說不好 shuo¹ pu hao³; 責備 tsê² pei⁴
S. (1) kwa˒; (3) tsuh be˒
C. 責成 chák˳ ˧shing

To —— without cause

M. 無故責罵 wu² ku⁴ tsê² ma⁴
S. 無緣故責備人 m yoen-koo˒ tsuh be˒ nyung
C. 無故責人 ˧mò kwú˒ chák˳ ˧yan

Blank

M. 空 k'ung¹
S. „ k'ong
C. „ 白 ˩hung pák˩

Blank forms

M. 空白樣式 k'ung¹ pai² yang⁴ shih⁴
S. „ „ „ „ k'ong bak yang˒ suh
C. 格式紙 kák˳ shik˩ ʿchí

—— cartridge

M. 無彈子的火藥包 wu² tan⁴-tzŭ ti huo³-yao⁴ pao¹
S. 沒彈子个火藥包 m tan ʿts kuh ʿhoo yak pau
C. 無彈子火藥包 ˧mò tán² ʿtsz ʿfo yök˩ ˩páú

Blanket

M. 氈子 chan¹-tzŭ
S. 絨毯 nyong t'an
C. (white) 白氈 pák˩ ˳chín

Blaze

M. 火光 huo³kuang¹; 火苗兒 huo³ miao² 'rh; (vb.) 發炎 fa¹ yen²
S. (1) ʿhoo kwaung; (vb.) 放光 faung˒ kwaung
C. (1) ʿfo ˩kwong; (vb.) (3) fát˳ ˧yím

Bleed

M. 流血 liu² hsieh³
S. „ „ lieu hyoeh
C. „ „ ˧laú hüt˳

Blind

M. 眼瞎了 yen³ hsia¹-lo

S. 瞎眼 hah ˁngan

C. 盲 ˌmáng; 盲眼 ˌmáng ˁngán

A —— person

M. 瞎子 hsia¹-tzŭ

S. ,, ,, hah ˁts

C. 盲眼嘅 máng ˁngan keˀ

—— (bamboo)

M. 簾子 lien²-tzŭ

S. ,, ,, lien ˁts

C. 竹簾 chuk˩ ˌlím *

Blister

M. 水泡 shui³ p'ao⁴

S. ,, ,, ˁs p'auˀ

C. ,, ,, ˁshui ˌp'áú

Block (of wood)

M. 一塊木頭 i¹ k'uai⁴ mu⁴-t'ou

S. ,, ,, ,, ,, ih kw'eˀ mok-deu; 木塊 mok kw'eˀ

C. 木頭 muk˩ ˌt'aú

To —— up a road

M. 擋道兒 tang³ tao⁴ 'rh

S. 塞住路 suh dzu looˀ

C. 塞路口 sak˩ lò² ˁhaú

Blockade

M. 封禁 fêng¹ chin⁴

S. ,, ,, fong kyungˀ

C. ,, ,, ˌfung kamˀ

To —— a seaport

M. 封閉海口 fêng¹ pi⁴ hai³-k'ou³

S. ,, ,, ,, ,, fong piˀ ˁhe-ˁk'eu; 封港 fong ˁkaung

C. 封海口 ˌfung ˁhoi ˁhaú

To raise the ——

M. 開封 k'ai¹ fêng¹

S. ,, ,, k'e fong

C. ,, ,, ˌhoi ˌfung

To run the ——

M. 闖封 ch'uang³ fêng¹

S. ,, ,, ts'aungˀ fong

C. ,, ,, ˁch'ong ˌfung

Blood

M. 血 hsieh³

S. ,, hyoeh

C. ,, hüt˳

Flesh and ——

M. 骨肉 ku³ jou⁴

S. ,, ,, kweh nyok

C. ,, ,, kwat˩ yuk˩

Blow (sb.)

M. 打 ta³

S. ,, ˁtang

C. ,, ˁtá

Blow, to kill by a

M. 打死 ta³ ssŭ³
S. „ 殺 ʿtang sah
C. „ 死 ʿta ʿsz

—— (vb.)

M. 吹 ch'ui¹; (wind) 颳 kua¹
S. „ ts'
C. „ ˌch'ui

To —— out

M. 吹滅 ch'ui¹ mieh⁴
S. „ 陰 ts' ʿiung
C. „ 熄 ˌch'ui sikˌ

To —— a trumpet

M. 吹喇叭 ch'ui¹ la³-pa
S. „ „ „ ts' la-pa
C. „ 號筒 ˌch'ui ho² ˌt'ung

To —— up

M. 轟壞 hung¹ huai⁴
S. „ „ hong wa›
C. 爆發 páú› fát˳

Blue

M. 藍 lan²
S. „ lan
C. „ ˌlám; (of the sky) 青 ˌts'ing

Blunt

M. 鈍 tun⁴
S. „ dung›
C. 唔利 ˌm léi²

Board

M. 板子 pan³-tzŭ; 木板 mu⁴ pan³
S. (1) ʿpan; (2) mok ʿpan
C. (1) ʿpán; (2) mukˌ ʿpán

Boat

M. 船 ch'uan²; 三板 san¹-pan³
S. (1) zen; (2) san ʿpan
C. (1) ˌshün; 艇 ʿt'eng†; (2) ˌsám ʿpán

Ferry ——

M. 渡船 tu⁴ ch'uan²
S. 擺渡船 ʿpa doo› zen
C. 橫水渡 ˌwáng ʿshuí tòˀ*

Gun ——

M. 小兵船 hsiao³ ping¹-ch'uan²
S. „ „ „ ʿsiau ping zen
C. 砲艦 p'áú› lámˀ

Pilot ——

M. 領江船 ling³ chiang¹ ch'uan²; 引水艇 yin³ shui³ t'ing³
S. (1) ʿling kaung zen
C. 帶水船 tái› ʿshui ˌshün

To travel by ——

M. 坐船 tso⁴ ch'uan²
S. „ „ ʿzoo zen
C. „ „ ʿts'o† ˌshün; 搭船 táp˳ ˌshün

Boatmen

M. 水手 shui³ shou³; (crew) 船家 ch'uan² chia¹

S. (head) 老大 ʿlau daˀ; (ordinary) 夥計 ʿhoo kyiˀ

C. 艇家 ʿt'eng† ˌká

Body

M. 身子 shên¹-tzŭ; 身體 shên¹ t'i³

S. (2) sung ʿt'i

C. (1) ˌshan ʿtsz; (2) ˌshan ʿt'ai

A —— of troops

M. 一支兵 i¹ chih¹ ping¹

S. „ „ „ ih ts ping

C. „ 隊 „ yatˌ tui² ˌping

—— guard

M. 護身兵 hu⁴ shên¹ ping¹

S. 侍衛 zˀweˀ; 親兵 ts'ing ping

C. 護身兵 wú² ˌshan ˌping

Boil (ulcer)

M. 瘡 ch'uang¹

S. „ ts'aung

C. „ ˌch'ong

—— (vb.)

M. 煮 chu³

S. 燒 sau

C. 炲 sháp₂; (1) ʿchü; 煲 ˌpò

Has the water boiled?

M. 水開了沒有 shui³ k'ai¹ lo mei² yu

S. 水阿曾開哉 ʿs a zung k'e tse

C. 水滾未呀 ʿshui ʿkwan méi² áˀ

To —— rice

M. 煮飯 chu³ fan⁴

S. 燒 „ sau vanˀ

C. 煮 „ ʿchü fán²

To —— soup

M. 熬湯 ao¹ t'ang¹

S. „ „ au t'aung

C. 煲湯 ˌpò ˌt'ong

Boiler

M. 氣鍋 ch'i⁴ kuo¹

S. 鑊子 wauh-ʿts; 鑵頭 kwenˀ deu

C. 鍋 wok₂; 爐 ˌlò

Bomb

M. 炸彈 cha⁴ tan⁴

S. „ „ tsoˀ danˀ

C. „ „ cháˀ tán²*

Bombard (city)

M. 放砲轟城 fang⁴ p'ao⁴ hung¹ ch'êng²

S. 放砲轟城 faungˀ p'auˀ hong dzung

C. 大炮攻城 tái² ˌp'áu ˌkung ˌsheng†

Bone

M. 骨頭 ku²-t'ou
S. „ „ kweh deu
C. „ kwat˩

Back ——

M. 脊梁骨 chi³-liang ku³
S. 背脊骨 pe tsih kweh
C. 腰骨 ˩yíú kwat˩

Collar ——

M. 琵琶骨 p'i²-p'a ku³
S. 鎖住 „ ˈsoo ˈdzu kweh
C. „ 匙 „ ˈso ˩shí kwat˩

Thigh ——

M. 大腿骨 ta⁴ t'ui³ ku³
S. „ „ „ doo˒ ˈt'e kweh
C. „ „ „ tái² ˈt'ui kwat˩

Book

M. 書 shu¹
S. „ su
C. „ ˩shü

Memorandum ——

M. 簿子 pu⁴-tzŭ
S. „ „ ˈboo ˈts
C. 記簿 kéi˒ pò²*

Account ——

M. 賬簿子 chang⁴ pu⁴-tzŭ
S. „ „ tsang ˈboo
C. 數 „ shò˒ pò²*

Book, to read a

M. 看書 k'an⁴ shu¹
S. „ „ k'oen˒ su; 念書 nyan˒ su
C. 睇書 ˈt'ai ˩shü; 讀書 tuk˩ ˩shü

Boots

M. 靴子 hsüeh¹-tzŭ
S. „ hyoo
C. (real, not ankle-high only) 靴 ˩hö; (ordinary are called shoes) 鞋 ˩hái

To put on ——

M. 穿靴 ch'uan¹ hsüeh¹
S. 着 „ tsak hyoo
C. „ „ chök˳ ˩hö

To take off ——

M. 脫靴 t'o¹ hsüeh¹
S. „ „ t'oeh hyoo
C. „ „ t'üt˳ ˩hö

Bootlace

M. 靴繩兒 hsüeh¹ shêng² 'rh; 靴帶子 hsüeh¹ tai⁴-tzŭ
S. 靴帶 hyoo ta˒
C. 鞋帶 ˩hái tái˒

Born

M. 生 shêng¹
S. „ sang
C. „ ˩sháng

Borrow

M. 借 chieh⁴
S. ,, tsia˒
C. ,, tse˒

Both

M. 兩個 liang³ ko¹
S. ,, 个 ˁliang kuh
C. ,, 個 ˧löng ko˒

—— of you

M. 你們倆 ni³-mên lia³
S. 俚兩个 na˒ ˁliang kuh
C. 你兩個 ˧néí ˧löng ko˒

Bottle

M. 并瓦子 p'ing²-tzŭ
S. ,, bing
C. 罇 ˩tsun

Bottom

M. 底 ti³; 底下 ti³ hsia
S. ,, ˁti; ,, ,, ˁti ˁau
C. ,, ˁtai; ,, ,, ˁtai há²

Sank to the ——

M. 沉到底下 ch'ên² tao⁴ ti³ hsia
S. ,, ,, ,, 裡 dzung tau˒ ˁti ˁli
C. ,, ,, ,, (下) ˩ch'am tò˒ ˁtai (há²)

Boundary

M. 疆界 chiang¹ chieh⁴; 邊界 pien¹ chieh⁴
S. (1) kyang ka˒; (2) pien ka˒
C. (1) ˩köng kái˒; 境界 ˁking kái˒

Beyond the ——

M. 邊外 pien¹ wai⁴
S. ,, ,, pien nga˒
C. 境界外 ˁking kái˒ ŋgoi²

Bow

M. (weapon) 弓 kung¹; (ship) 船頭 ch'uan²-t'ou²; (vb.) 打躬 ta¹ kung¹; 作揖 tso⁴ i¹
S. (1) kong; (2) zen deu; (3) ˁtang kong; (4) tsauh ih
C. (1) ˩kung; (2) ˩shün ˩t'aú; (4) tsok₀ yap₂

Bowels

M. 腸子 ch'ang²-tzŭ
S. 肚腸 ˁdoo dzang
C. 腸 ˩ch'öng

Bowl

M. 碗 wan³
S. ,, ˁˁwen
C. ,, ˁwún

Box

M. 箱子 hsiang¹-tzŭ
S. ,, ,, siang ˁts
C. ,, ˩söng

Box, small

M. 盒子 ho²-tzŭ

S. 匣子 ʿah ʿts

C. 盒(仔) hop₂ (ʿtsai); 小箱 ʿsiú ˌsöng

To ——

M. 打拳頭 ta³ chʿüan²-tʿou

S. „ „ „ ʿtang joen deu

C. 拳打 ˌkʿün ʿtá

Boy

M. 孩子 hai²-tzŭ

S. 小囝 ʿsiau noen

C. 男仔 ˌnám ʿtsai

School ——

M. 學生 hsüeh² shêng¹

S. „ „ ʿauh sang

C. „ „ hok₂ ˌsháng

—— (servant)

M. 跟班的 kên¹-pan¹-ti

S. 細者 siˀ-tse

C. 事仔 sz² ʿtsai

Braces

M. 帶子 tai⁴-tzŭ

S. „ „ taˀ ʿts; 攀帶 pʿanˀ taˀ

C. 過膊褲帶 kwoˀ pok₀ fúˀ táiˀ

Brackish

M. 鹹味的 hsien² wei⁴ ti

S. „ „ 道 ʿan miˀ dauˀ

C. 水鹹味 ʿshui ˌhám méi²

Brains

M. 腦子 nao³-tzŭ

S. „ „ ʿnau ʿts

C. „ 漿 ʿnò ˌtsöng

Bran

M. 麩子 fu¹-tzŭ

S. „ 皮 foo bi

C. 麥糠 mak₂ ˌhong

Brandy

M. 布蘭的酒 pu-lan-ti chiu³

S. „ „ „ „ pooˀ-lan-di ʿtsieu

C. 罷欄地酒 pá² lán² téi² ʿtsaú

Brass

M. 黃銅 huang² tʿung²

S. „ „ waung dong

C. „ „ ˌwong ˌtʿung

Brave

M. 勇 yung³; 大膽子 ta⁴ tan³-tzŭ

S. (1) ʿiong; 膽大 ʿtan dooˀ

C. (1) ˌyung

To brave death

M. 冒死 mao^{4} ssŭ^{3}
S. „ „ mau^{5} ^{c}si
C. „ „ mò^{2} ^{c}sz

Brazier (man)

M. 銅匠 t'ung^{2} chiang^{4}
S. „ „ dong ziang^{5}
C. „ „ $_{c}$t'ung tsöng^{2}*; 打銅佬 ^{c}tá $_{c}$t'ung ^{s}lò

Charcoal ——

M. 炭爐 t'an^{4} lu^{2}
S. „ 盆 t'an^{5} bung
C. „ 斗 t'án^{5} ^{c}taú

Bread (foreign)

M. 麵包 mien^{4}-pao^{1}
S. „ „ mien^{5} pau
C. „ „ mín^{2} $_{o}$páú

—— (native)

M. 饅頭 man^{2}-t'ou
S. „ „ men deu
C. 麵 „ mín^{2} $_{c}$t'aú

Break

M. 破 p'o^{4}; 斷 tuan^{4}; 折 chê^{2}
S. (1) p'oo^{5}; (2) ^{c}doen; 打破 ^{c}tang p'oo^{5}
C. 打爛 ^{c}tá lán^{2}

To —— an oath

M. 背誓 pei^{4} shih^{4}
S. „ „ pe^{5} z^{5}
C. „ „ púi^{5} shai^{2}

To break open

M. 打開 ta^{3} k'ai^{1}
S. „ „ ^{c}tang k'e
C. „ „ ^{c}tá $_{c}$hoi; 打爛 ^{c}tá lán^{2}

To —— the ranks

M. 破陣 p'o^{4} chên^{4}
S. „ „ p'oo^{5} dzung^{5}
C. „ „ p'o^{5} chan^{5}

To —— to pieces

M. 打碎 ta^{3} sui^{4}
S. „ „ ^{c}tang se^{5}
C. „ „ ^{c}tá sui^{5}

Breakfast

M. 早飯 tsao^{3} fan^{4}
S. „ „ ^{c}tsau van^{5}
C. „ „ ^{c}tsò fán^{2}; 早餐 ^{c}tsò $_{c}$ts'án*

Breath

M. 氣 ch'i^{4}; 口氣 k'ou^{3}-ch'i^{4}
S. „ chi^{5}; „ „ ^{c}k'eu chi^{5}
C. „ héi^{5}; „ „ ^{c}haú héi^{5}

Breathe

M. 出氣 ch'u^{1} ch'i^{4}
S. 呼吸 hoo hyih; 透氣 t'eu^{5} chi^{5}
C. „ „ $_{c}$fú k'ap$_{5}$

Breech (gun)

M. 後膛 hou^{4} t'ang^{2}
S. „ „ ^{c}eu daung
C. „ „ haú^{2} $_{c}$t'ong

Breeze

M. 風 fêng[1]
S. ,, fong
C. ,, ˌfung

A favourable ——

M. 順風 shun[4] fêng[1]
S. ,, ,, zung˒ fong
C. ,, ,, shun[2] ˌfung

Brick

M. 磚頭 chuan[1]-t'ou
S. ,, ,, tsen deu
C. ,, ˌchün

Bridge

M. 橋 ch'iao[2]
S. ,, jau
C. ,, ˌk'íú

A floating ——

M. 浮橋 fu[2] ch'iao[2]
S. ,, ,, veu jau
C. ,, ,, ˌfaú ˌk'íú

A suspension ——

M. 挂橋 kua[4] ch'iao[2]
S. ,, ,, kwo˒ jau
C. ,, ,, kwá˒ ˌk'íú

Bridle

M. 嚼子 chiao[2]-tzŭ
S. ,, ,, ziak ˁts
C. 轡 ˌköng

Brigade

M. 聯隊 lien[2] tui[4]
S. ,, ,, lien de˒
C. 鎮標 chan˒ ˌpíú

Brigadier-general

M. 協都統 hsieh-tu[1]-t'ung[3]; 陸軍少將 lu[4] chün shao[4] chiang[1]; 鎮台 chên[4]-t'ai
S. (1) hyih tok ˁt'ong; (2) lok kyuin ˁsau tsiang˒
C. (2) luk˳ ˌkwan ˁshíú ˌtsöng; (3) chan˒ ˌt'oi

Brigands

M. 賊匪 tsei[2] fei[3]; 强盜 ch'iang[2] tao[4]
S. (1) zuh fi; (2) jang dau˒
C. (1) ts'ak˳ ˁféi; 盜賊 tò[2] ts'ák˳*

Bright

M. 亮 liang[4]; 光明 kuang[1] ming[2]; 光亮 kuang[1] liang[4]
S. 明 ming; (2) kwaung ming; 明亮 ming liang˒
C. 光 ˌkwong; (2) ˌkwong ˌming

Bring

M. 拿...來 na[2] lai[2]; 帶來 tai[4] lai[2]
S. (1) nau le; (2) ta˒ le
C. 撦 ˌning; 拈 ˌním; 帶 tái˒

—— the book here

M. 拿書來 na[2] shu[1] lai[2]
S. ,, ,, ,, nau su le
C. 撦咁個部書嚟 ˌning ˁko pò[2] ˌshü ˌlai

Bring back

M. 拿回來 na² hui² lai²
S. „ „ „ nau we le
C. 掙翻嚟 ˌning ˌfán ˌlai

—— away

M. 帶去 tai⁴ ch'ü⁴
S. „ „ ta˒ chi˒
C. „ „ tái˒ hui˒

Broad

M. 寬 k'uan¹
S. 濶 kw'eh
C. 闊 fút。

Five feet ——

M. 五尺寬 wu³ ch'ih³ k'uan¹
S. „ „ 濶 ʿng ts'ak kw'eh
C. „ „ 闊 ʿng ch'ek。 fút。

The river is very ——

M. 河狠寬 ho² hên³ k'uan¹
S. „ 非常濶 ʿoo fi dzang kw'eh
C. „ 好闊 ˌho ʿhò fút。

Broken

M. 破了 p'o⁴ lo
S. 斷哉 ʿdoen tse
C. 爛阻 lán² ʿcho

—— asunder

M. 折斷了 chê² tuan⁴ lo
S. „ „ „ ts'ak ʿdoen liau
C. „ „ chít。 ˩t'ün

Brother

M. 弟兄 ti⁴ hsiung
S. „ „ ʿdi hyong
C. 兄弟 ˌhing tai²(also means cousin and clansman)

Elder ——

M. 哥哥 ko¹ ko
S. 阿 „ aḳ koo
C. 大佬 tái² ʿlò

Younger ——

M. 兄弟 hsiung¹ ti
S. „ „ hyong-ʿdi ; 弟弟 ʿdi ʿdi
C. 細佬 sai˒ ʿlò

Brown

M. 棕色 tsung¹ sê⁴; 土色 t'u³ sê⁴
S. (1) tsong suh
C. (1) ˌtsung shik˩

Bruise

M. 青血跡 ch'ing¹ hsieh³ chi⁴
S. 傷痕 saung ʿung
C. 瘀傷 yü² ˌshöng

Brush

M. 刷子 shua¹-tzŭ
S. „ seh
C. 擦 ts'át。

To brush boots

M. 刷靴子 shua[1] hsüeh[1]-tzŭ

S. ,, ,, seh hyoo

C. 擦鞋 (*or* if top boots 靴) ts'át$_{o}$ ˌhai (*or* ˌhö)

Bucket

M. 桶子 t'ung[3]-tzŭ

S. 水桶 ᶜs ᶜdong

C. ,, ,, ᶜshui ᶜt'ung

Buddha

M. 佛爺 fo[2] yeh

S. ,, veh

C. ,, fat$_{2}$

Buddhism

M. 佛教 fo[2] chiao[4]

S. ,, ,, veh kyau[3]

C. ,, ,, fat$_{2}$ káú[3]

Buddhist

—— **temple**

M. 廟 miao[4]

S. ,, miau[3]: 和尚堂 ᶜoo zaung[3] daung

C. ,, míú[2]*

—— **priest**

M. 和尚 ho[2]-shang[4]; 僧人 sêng[1] jên[2]

S. (1) ᶜoo zaung[3]

C. (1) ˌwo shöng[2]*

—— **nun**

M. 尼姑 ni[2]-ku[1]

S. ,, ,, nyi koo

C. ,, ,, ˌnéi $_{o}$kwú

Buffalo

M. 水牛 shui[3] niu[2]

S. ,, ,, ᶜs nyeu

C. ,, ,, ᶜshui ˌngaú

Bug

M. 虫 ch'ung[2]

S. ,, dzong

C. ,, ˌch'ung

—— **(bed-bug)**

M. 臭虫 ch'ou[4] ch'ung

S. ,, ,, ts'eu[3] dzong

C. 木虱 muk$_{2}$ shat$_{5}$

Bugle

M. 號筒 hao[4] t'ung[3]; 喇叭 la[3]-pa[1]

S. (1) 'au[3] dong; 洋號 yang 'au[3]

C. 號角 hò[2] kok$_{o}$

Build

M. 起 ch'i[3]; 蓋 kai[4]; 建造 chien[4] tsao[4]

S. 造 ᶜzau

C. (1) ᶜhéi; 起造 ᶜhéi tsò[2]; (3) kín[3] tsò[2]

To —— a house

M. 蓋房子 kai[4] fang[2]-tzŭ

S. 造 ,, ,, ᶜzau vaung ᶜts

C. 起間屋 ᶜhéi ˌkán uk$_{5}$

Bull

M. 公牛 kung[1] niu[2]
S. 雄 ,, yong nyeu
C. 牛公 ˏngaú ˌkung

Bullet

M. 彈子 tan[4]-tzŭ; 槍子兒 ch'iang[1] tzŭ[3] 'rh
S. (1) dan' ʿts
C. (1) tán[2] ʿtsz

Bullock

M. 騸牛 shan[1] niu[2]
S. ,, ,, san nyeu
C. ,, ,, shín' ˏngaú

Buoy

M. 浮樁 fu[2] chuang[1]; 浮標 fu[2] piao[1]
S. (2) veu piau
C. 泡 ʿp'ò

Life ——

M. 救命圈 chiu[4] ming[2] ch'üan[1]
S. ,, ,, ,, kyeu' ming' choen
C. ,, 生 ,, káú' ˌsháng ˚hün

Burial

M. 喪事 sang[1] shih[4]
S. ,, ,, saung z'
C. ,, ,, ˌsong sz[2]; 埋葬 ˏmái tsong'

Burial rites

M. 喪禮 sang[1] li[3]
S. ,, ,, saung ʿli
C. ,, ,, ˌsong ʿlai

Burmah

M. 緬甸 mien[3] tien[4]
S. ,, ,, mien dien
C. ,, ,, ʿmín tín[2]

Burn

M. 燒 shao[1]; 燒傷 shao[1] shang[1]
S. (1) sau; 火傷 ʿhoo saung
C. (1) ˌshíú

To —— incense

M. 燒香 shao[1] hsiang[1]
S. ,, ,, sau hyang
C. ,, ,, ˌshíú ˌhöng (*or* ˚höng)

Bury

M. 葬埋 tsang[4] mai[2]
S. 埋葬 ma tsaung'; 落葬 lauh tsaung'
C. 葬埋 tsong' ˏmái

Bush

M. 小樹 hsiao[3] shu[4]
S. ,, ,, ʿsiau zu'
C. ,, ,, ʿsíú shü[2]

Business

M. 事 shih[4]; 事情 shih[4]-ch'ing; 事務 shih[4]-wu
S. 事體 z' ʿt'i; 生意 sang i'
C. (1) sz[2]; 事幹 sz[2] kon'

Business, important

M. 要緊的事 yao⁴-chin³ ti shih⁴
S. „ „ 事體 iau⁷ ᶜkyung z⁷ ᶜt'i
C. 緊要事 ᶜkan yíú⁷ sz²

—— is bad

M. 事情不好 shih⁴-ch'ing pu⁴ hao³
S. „ „ 勿 „ z⁷ dzing veh ᶜhau
C. 生意好淡 ᶜsháng† yi⁷ ᶜhò tám²

An extensive ——

M. 大生意 ta⁴ shêng¹-i⁴
S. „ „ „ doo⁷ sang i⁷
C. „ „ „ tái² ᶜsháng yi⁷

To manage ——

M. 管事 kuan³ shih⁴
S. „ „ ᶜkwen z⁷
C. (辦)理事 (pán²) ᶜléi sz²

Busy

M. 有事 yu³ shih⁴; 忙 mang²
S. 有事 ᶜyeu z⁷; (2) maung
C. „ „ ᶜyaú sz²

Are you —— ?

M. 忙不忙 mang² pu mang²
S. „ 勿 „ maung veh maung
C. 你得閒唔得閒呢 ᶜnéi tak₂ ᶜhán ᶜm tak₂ ᶜhán ᶜni

Very busy

M. 忙得很 mang² tê hên³
S. „ „ 了勿得 maung tuh liau ᶜveh tuh
C. 事幹多 sz² kon⁷ ᶜto

But

M. 但 tan⁴; 可 k'o³
S. „ 是 dan⁷ ᶜz
C. „ tán²

—— I fear

M. 只怕 chih³ p'a⁴
S. „ „ tsuh p'o⁷
C. 但我怕 tán² ᶜngo p'á⁷

Not only . . . —— also

M. 不但 . . . 而且 pu⁴ tan⁴ . . . erh² ch'ieh³
S. 勿但 . . . 而且 veh dan⁷ . . . r ᶜts'ia
C. 非獨 . . . 而且 ᶜféi tuk₂ . . . ᶜyí ᶜch'e

Butcher

M. 賣肉的 mai⁴ jou⁴ ti; 宰牛的 tsai³ niu² ti
S. 賣肉个 ma⁷ nyok kuh; 殺牛个 sah nyeu kuh
C. 屠夫 ᶜt'ò ᶜfú; 賣牛肉嘅 mai² ᶜngaú yuk₂ ke⁷

Butter

M. 黃油 huang² yu²; 奶油 nai³ yu²
S. 牛油 nyeu yeu; (2) ᶜna yeu
C. „ „ ᶜngaú ᶜyaú

Button

M. 鈕子 niu³-tzŭ

S. „ „ ᶜnyeu ᶜts; 鈕頭 ᶜnyeu deu

C. 鈕 ᶜnaú

—— of rank

M. 頂戴 ting³-tai⁴

S. „ 子 ᶜting ᶜts

C. „ ᶜteng†

To ——

M. 扣上鈕子 k'ou⁴-shang niu³-tzŭ

S. „ „ „ 頭 k'eu' zaung' ᶜnyeu deu

C. „ 鈕 k'aú' ᶜnaú

Buy

M. 買 mai³

S. „ ᶜma

C. „ ᶜmái

By

M. 以 i³; 從 ts'ung²; 用 yung⁴; 由 yu²

S. (2) dzong; (3) yong'; (4) yeu

C. (1) yí; (2) ᶜts'ung; (3) yung²; (4) ᶜyaú; 打 ᶜtá

—— no means

M. 千萬不 ch'ien¹ wan⁴ pu

S. 並非 bing' fi; 決勿 kyoeh 'veh

C. 斷唔係 tün' ᶜm hai²

—— this method

M. 用這個法子 yung⁴ chê⁴-ko fa²-tzŭ

S. 用第个法子 yong' di' kuh fah ᶜts

C. 用此法子 yung² ᶜts'z fát₀ ᶜtsz

He has gone ——

M. 他過去了 t'a¹ kuo⁴ ch'ü⁴ lo

S. 伊過去哉 yi koo' chi' tse

C. 佢經過去咯 ᶜk'ui ᶜking kwo' hui' lok₀

—— the river side

M. 在河邊 tsai⁴ ho² pien¹

S. „ „ „ ᶜdze ᶜoo pien

C. „ „ „ tsoi² ᶜho ᶜpín

To sell —— the pound

M. 論斤賣 lun⁴ chin¹ mai⁴

S. „ „ „ lung' kyung ma'

C. 斷磅 „ tün² pong² mái²

—— chance

M. 偶然 ou³-jan²; 可巧 k'o³ ch'iao³

S. „ „ ᶜngeu zen

C. „ „ ᶜngo ᶜyín

One —— one

M. 一 — i¹ i¹; 一個一個 i ko i ko

S. 一个一个 ih kuh ih kuh

C. 逐一 chuk₂ yat₅

Cabbage

M. 白菜 pai² ts'ai⁴
S. „ „ bak ts'e³
C. (native) 白菜 pák₂ ts'oi³; (foreign) 椰菜 ˏye ts'oi³

Cable

M. 纜 lan⁴; (telegraph) 海線 hai³ hsien⁴
S. (1) lan³; (2) ˇhe sien³
C. (1) lám²; 海纜 ˇhoi lám²

Cake

M. 餅 ping³; 糕 kao¹
S. „ ˇping; „ kau
C. „ ˇpeng†

Calendar

M. (Chinese) 皇曆 huang² li⁴; (Western) 西曆 hsi¹ li⁴
S. (Chinese) (1) waung lih; (Western) (2) si lih
C. (Chinese) 華曆 ˏwá lik₂; (Western) (2) ˏsai lik₂

Call

M. 叫 chiao⁴; 喊 han³
S. „ kyau³; „ han³
C. „ kíú³

—— him here

M. 叫他來 chiao⁴ t'a¹ lai²
S. „ 伊 „ kyau³ yi le
C. „ 佢嚟 kíú³ ˏk'ui ˏlai

Call over names

M. 點名 tien³ ming²
S. „ „ tien ming
C. „ „ ˇtím ˏmeng†

To —— upon (visit)

M. 拜 pai⁴
S. „ 望 pa³ maung³
C. 探 t'ám³

What is it called?

M. 叫甚麼 chiao⁴ shê(n)²-mo
S. „ 啥 kyau³ sa³
C. „ 乜名 kíú³ mat₂ ˏmeng*†

Calm

M. 安靜 an¹ ching; 平安 p'ing² an
S. (1) oen ˇzing; 平靜 bing ˇzing
C. (1) ˏon tsing²; (2) ˏp'ing ˏon

Camp

M. 營盤 ying² p'an; 兵營 ping¹ ying²
S. (1) yung ben; (2) ping yung
C. (1) ˏying ˏp'ún

To pitch a ——

M. 劄營 cha¹ ying²
S. „ „ tsah yung
C. „ „ cháp₀ ˏying

Can. *See* **Able.**

—— it be done?

M. 可不可 k'o³ pu k'o³; 行不行 hsing² pu hsing²

S. 行勿行 ᶜang 'veh ᶜang; 可以勿可以 ᶜk'au ᶜi 'veh ᶜk'au ᶜi

C. 做得唔做得呢 tsò² tak₅ ⸢m tsò² tak₅ ⸢ni?

It —— be done

M. 可以做 k'o³-i³ tso⁴

S. ,, ,, ,, ᶜk'au ᶜi tsooˀ

C. 做得 tsò² tak₅

Canal

M. 水道 shui³ tao⁴; 溝 kou¹

S. (1) ᶜs dauˀ; (2) keu

C. 水涌 ᶜshui ⸢ch'ung

—— with locks

M. 閘河 cha¹ ho²

S. ,, ,, zah ᶜoo

C. ,, ,, cháp₂ ⸢ho

The Grand ——

M. 運糧河 yün⁴ liang ho²; 漕運河 ts'ao² yün ho²

S. (1) yuinˀ liang ᶜoo; 運河 yuinˀ ᶜoo; 千里河 ts'ien li ᶜoo

C. 運河 wan² ⸢ho

Candle

M. 蠟 la⁴; 燭 chu²

S. ,, 燭 lah tsok

C. (2) chuk₅; 蠟燭 láp₂ chuk₅

Light the ——

M. 點蠟 tien³ la⁴

S. ,, ,, 燭 tien lah tsok

C. ,, ,, ,, ᶜtím láp₂ chuk₅

—— stick

M. 蠟臺 la⁴ t'ai²

S. ,, ,, lah de

C. 燭 ,, chuk₅ ⸢t'oi*

Cane

M. 籐子 t'êng²-tzŭ

S. ,, dung

C. ,, ⸢t'ang

—— chair

M. 籐椅子 t'êng² i³-tzŭ

S. ,, ,, ,, dung iui ᶜts

C. ,, ,, ⸢t'ang ᶜyí

Sugar ——

M. 甘蔗 kan¹-chê

S. ,, ,, ken tsoˀ

C. 蔗 cheˀ

Cangue

M. 枷 chia¹

S. ,, ka

C. ,, ⸢ká

Cangue, wear the

M. 扛枷 k'ang² chia¹; 枷號 chia¹ hao⁴
S. 帶枷 ta› ka
C. 擔枷 ˌtám ˌká

Cannon

M. 炮 p'ao⁴
S. ,, p'au›
C. ,, p'áú›

—— **ball**

M. 炮子兒 p'ao⁴ tzŭ³ 'rh
S. ,, ,, p'au› ˇts
C. ,, ,, p'áú› ˇtsz; 炮碼 p'áú› ˌmá*

To fire a ——

M. 放炮 fang⁴ p'ao⁴
S. ,, ,, faung› p'au›
C. ,, ,, fong› p'áú›; 燒炮 ˌshíú p'áú›

Cap

M. 帽子 mao⁴-tzŭ
S. ,, ,, mau› ˇts
C. ,, 仔 mò²* ˇtsai; 小帽 ˇsíú mò²*

Wear a ——

M. 戴帽子 tai⁴ mao⁴-tzŭ
S. 帶 ,, ,, ta› mau› ˇts
C. 戴小帽 (*or* 帽仔) tái› ˇsíú mò²* (*or* mò²* ˇtsai)

Capital (money)

M. 本錢 pên³ ch'ien
S. ,, ,, ˇpung dzien
C. ,, ,, ˇpún ˌts'ín*

—— **(city)**

M. 京都 ching¹ tu¹; 京城 ching¹ ch'êng²
S. (2) kyung dzung
C. (1) ˌking ˌtò

Gone to the —— (Peking)

M. 上京去 shang⁴ ching¹ ch'ü⁴
S. 進京 tsing› kyung
C. 上京 ˇshöng ˌking

—— **punishment**

M. 正法 chêng⁴ fa³
S. 死刑 ˇsi iung
C. 正法 ching› fát꜀

Capitulate

M. 投降 t'ou² hsiang²
S. ,, ,, deu 'aung
C. ,, ,, ˌt'au ˌhong

Captain (of a ship)

M. 船主 ch'uan² chu³
S. ,, ,, zen ˇtsu
C. ,, ,, ˌshün ˇchü

Captain (in the army)

M. 守備 shou³-pei⁴; 陸軍上尉 lu⁴ chün¹ shang⁴ wei⁴

S. (1) ᶜseu beᵓ; (2) lok kyuin zaung wei

C. (1st) 都司 ᶜtò ᶜsz; (2nd) (1) ᶜshaú péi²; 隊官 tui² ᶜkwún

—— (in the navy)

M. 水師統領 shui³-shih¹ t'ung¹-ling³

S. „ „ „ „ ᶜsoe s ᶜt'ong ling

C. „ „ 參將 ᶜshui ᶜsz ᶜts'ám tsöngᵓ

Capture

M. 拿獲 na² huo⁴

S. 拿住 nau dzuᵓ; 捉到 tsauh tauᵓ

C. 拿獲 ᶜná wok₂

To —— a thief

M. 獲賊 huo⁴ tsei²

S. 捉 „ tsauh zuh

C. „ „ chuk₀ ts'ák₂*

Card (visiting)

M. 名片 ming² p'ien⁴; 片子 p'ien⁴-tzŭ

S. (1) ming p'ienᵓ; (2) p'ienᵓ ᶜts; 拜帖 paᵓ t'ih

C. (名)帖 (ᶜming) t'íp₀*; 拜帖 ᶜpái t'íp₀

Careful

M. 仔細 tzŭ³ hsi⁴; 謹慎 chin³ shên⁴

S. (1) ᶜts siᵓ; (2) ᶜkyung zungᵓ

C. (1) ᶜtsz saiᵓ; (2) ᶜkan shan²

Be ——

M. 小心 hsiao³ hsin¹

S. „ „ ᶜsiau sing; 當心 taung sing

C. „ „ ᶜsíú ᶜsam

Careless

M. 草率 ts'ao³ shuai⁴

S. 勿留心 'veh lieu sing; 大意 daᵓ iᵓ

C. 冇小心 ᶜmò ᶜsíú ᶜsam

Cargo

M. 船貨 ch'uan² huo⁴

S. „ „ sen hooᵓ

C. „ „ (ᶜshün) foᵓ

To discharge ——

M. 起貨 ch'i³ huo⁴

S. „ „ ᶜchi hooᵓ

C. „ „ ᶜhéi foᵓ

To take in ——

M. 下貨 hsia⁴ huo⁴

S. „ „ ᶜ'au hooᵓ

C. 落 „ lok₂ foᵓ

—— certificate

M. 總單 tsung³ tan

S. „ „ ᶜtsong tan

C. „ „ ᶜtsung ᶜtán

Cargo boat

M. 駁船 po² ch'uan²
S. „ „ pok zen
C. 西瓜扁 ˌsai ˌkwá ˈpín; 盤艇 ˌp'ún ˈt'eng†

Carpenter

M. 木匠 mu⁴ chiang
S. „ „ mok ziang˒
C. „ „ muk˳ tsöng²*; 鬪木佬 taú˒ muk˳ ˈlò

Carpet

M. 地毯 ti⁴ t'an³
S. „ „ di ˈt'an
C. „ 氈 téi² ˌchín

Carry

—— **(on a pole)**

M. 挑 t'iao¹; 擔 tan¹; (by two men) 抬 t'ai²
S. (1) t'iau; (3) de; 掮 jien
C. (2) ˌtám; (3) ˍt'oi

—— **(on the back)**

M. 背上 pei⁴-shang; (animals) 馱 t'o²
S. „ pe˒
C. 畀 ˌme

—— **(on the shoulder)**

M. 扛 k'ang²
S. „ kaung
C. 托 t'ok˳

Carry (in the arms)

M. 抱 pao⁴
S. „ ˈbau
C. „ ˈp'ò

—— **(about one)**

M. 帶 tai⁴
S. „ ta˒
C. „ 埋身上 tái˒ ˍmái ˌshan shöng²

To —— off by force

M. 搶去 ch'iang³ ch'ü⁴
S. „ „ ˈts'iang chi˒
C. „ „ ˈts'öng hui˒

To —— out an affair

M. 成事 ch'êng² shih⁴
S. „ „ dzung z˒
C. „ „ ˍshing sz²

To —— on

M. 照常不歇 chao⁴ ch'ang² pu hsieh¹
S. „ „ 做去 tsau˒ dzang tsoo˒ chi˒
C. „ „ 不歇嚟做 chíú˒ shöng² pat˳ hít˳ ˍlai tsò²

Cart

M. 車 ch'ê¹
S. „ ts'o
C. „ ˌch'e

Carter

M. 車夫 ch'ê[1] fu[1]; 趕車的 kan[3]-ch'ê[1]-ti
S. „ „ t'so foo
C. „ „ ˌch'e ˌfú

Cartridge

M. 火藥包子 huo[3]-yao[4] pao[1]-tzŭ
S. „ „ „ ˈhoo yak pau
C. „ „ „ 子 ˈfo yök˳ ˌpáu ˈtsz

Cash

M. 錢 ch'ien[2]
S. „ dien
C. „ ˍts'ín*; 銀 ˍngan*

Copper ——

M. 銅錢 t'ung[2] ch'ien[2]
S. „ „ dong dien
C. „ „ ˍt'ung ˍts'ín*

A string of ——

M. 一吊錢 i[1] tiao[4] ch'ien[2]; 一串錢 i ch'uan[4] ch'ien[2]
S. „ „ „ ih ts'en˳ dien
C. (1) yat˳ tíú˳ ˍts,ín*; (2) yat˳ ch'ün˳ ˍts'ín*

Castle

M. 城堡 ch'êng[2] pao[3]
S. „ „ dzung pau
C. „ „ ˍsheng† ˈpò

Cat

M. 貓 mao[1]
S. „ mau
C. „ ₒmáú

Catch

M. 拿住 na[2] chu[4]
S. „ „ nau dzu˳; 捉拿 tsauh nau
C. 捉 chukₒ

To —— up (overtake)

M. 趕上 kan[3] shang[4]
S. „ 到 ˈkoen tau˳; 追趕 tsoe ˈkoen
C. „ „ ˈkon tò˳

Cattle

M. 牲口 shêng[1] k'ou
S. 中牲 tsong sang
C. 牲口 ˍsháng† ˈhaú

A drove of ——

M. 一群牲口 i[1] ch'ün[2] shêng[1] k'ou
S. „ „ 中牲 ih juin tsong sang
C. „ „ 畜生 yat˳ ˍk'wan chuk˳ ˍsháng

Catty

M. 斤 chin[1]
S. „ kyung
C. „ ˍkan

Cause

M. 緣故 yüan² ku

S. „ „ yoen koo˒

C. „ „ ˩yün kwú˒

For this ——

M. 因此 yin¹ tz'u³

S. „ „ iung ˥ts'

C. „ „ ˩yan ˥ts'z

Without ——

M. 無故 wu² ku⁴

S. „ 緣無故 m yoen m koo˒

C. „ 故 ˩mò kwú˒

—— (vb.)

M. 叫 chiao⁴; 使 shih; 令 ling⁴

S. (2) s˒; 撥 peh; 使得 s˒ tuh

C. (2) ˥shai; (3) ling²

To —— disorder

M. 生亂 shêng¹ lüan⁴

S. „ „ sang loen˒

C. „ „ ˩sháng† lün²

Cavalry

M. 馬兵 ma³ ping¹; 馬隊 ma³ tui⁴

S. (1) ˥mo ping; (2) ˥mo de˒

C. (1) ˥má ˩ping; (2) ˥má tui²

A body of ——

M. 一班馬兵 i¹ pan¹ ma³ ping

S. „ 群 „ „ ih juin ˥mo ping

C. 一班馬兵 yat˩ ˩pán ˥má ˩ping

Cave

M. 洞子 tung⁴-tzŭ

S. 山洞 san dong˒

C. „ „ ˩shán tung²

Ceiling

M. 頂棚 ting³ p'êng²

S. 天花板 t'ien hwo ˥pan

C. „ „ „ ˩t'ín ˩fá ˥pán

Cellar

M. 地窖 ti⁴ chiao⁴; 地窨子 ti⁴ yin⁴-tzŭ

S. (1) di˒ kyau˒

C. 土庫 ˥t'ò fú˒

Cemetery

M. 墳院 fên² yüan⁴; 墳地 fên² ti⁴

S. (1) vung yoen; (2) vung di˒

C. (2) ˩fan téi²; 墳場 ˩fan ˩ch'öng

Cent (one)

M. 一分錢 i¹ fên¹ ch'ien²

S. „ „ ih fung

C. „ 個仙(士) yat˩ ko˒ ˬsín (sz²*)

10 cents

M. 一毛錢 i¹ mao² ch'ien²

S. „ 角子 ih kauh ˥ts

C. „ 毫 yat˩ hò²

25 cents ($\frac{1}{4}$ dollar)

M. 二角五分 êrh^{2} chiao^{3} wu^{3} fên^{1}

S. 廿五分 nyan^{2} ᶜng fung

C. 二毫半 yi^{2} hò^{2} pún^{2}; 二十五仙 yi^{2} shap$_{2}$ ᶜng ₀sín; — 啲 yat$_{5}$ kwat$_{5}$

Five per ——

M. 值百抽五 chih^{2} po^{2} ch'ou^{1} wu^{3}

S. 一 „ „ „ ih pak ts'eu ᶜng

C. 九五扣 ᶜkaú ᶜng k'aú^{2}

Centre

M. 中 chung; 中間兒 chung^{1} chie(n)^{4} 'rh

S. „ 心 tsong sing

C. „ ᶜchúng; 中央 ᶜchung ᶜyöng

—— of a river

M. 河心 ho^{2} hsin^{1}

S. „ „ ᶜoo sing

C. „ „ ᶜho ᶜsam; 河中 ᶜho ᶜchung

Certain

M. 一定 i^{1} ting^{4}; 必定的 pi^{4} ting^{4} ti

S. (1) ih ding^{2}; 必定个 pih ding^{2} kuh

C. (1) (yat$_{5}$) ting^{2}; 必定 pít$_{5}$ ting^{2}

A certain day

M. 某日 mou^{3} jih^{4}

S. „ „ ᶜmeu nyih

C. „ „ ᶜmaú yat$_{5}$

Certainly

M. 必定 pi^{4} ting^{4}; 果然 kuo^{3} jan^{2}

S. (1) pih ding^{2}; (2) ᶜkoo zen

C. 定喇 ting^{2}* ᶜlá

—— not

M. 斷不可 tuan^{4} pu k'o^{3}

S. 一定勿是 ih ding^{2} 'veh ᶜz

C. 實唔係 shat$_{5}$ ᶜm hai^{2}

Chain

M. 鏈 lien^{2}; 鎖鏈子 so^{3} lien^{2}-tzŭ

S. 鍊 lien

C. (1) lín^{2}*

—— him up

M. 鎖住他 so^{3} chu^{4} t'a^{1}

S. „ „ 伊 ᶜsoo dzu^{2} yi

C. 俾條鍊鎖住佢 ᶜpéi ᶜt'íú lín^{2}* ᶜso chü^{2} ᶜk'ui

Chair

M. 椅子 i^{3}-tzŭ

S. „ „ iui^{2} ᶜts

C. „ ᶜyí

Sedan ——

M. 轎子 chiao^{4}-tzŭ

S. „ „ jau^{2} ᶜts

C. „ kíú^{2}*

Chair bearer

M. 轎夫 chiao⁴ fu
S. „ „ jau⁵ foo
C. „ „ kíú²* ₀fú

Change

M. 改 kai³; 換 huan⁴
S. „ ᶜke; „ wen⁵; 變 pien⁵
C. „ ᶜkoi; „ wún²; „ pín⁵

—— **clothes**

M. 換衣服 huan⁴ i¹-fu
S. „ „ 裳 wen⁵ i zaung
C. „ „ 服 wún² ₍yí fuk₂

—— **one's mind**

M. 改主意 kai³ chu²-i
S. „ „ „ ᶜke ᶜtsu i⁵
C. 心事改變 ₍sam sz² ᶜkoi pín⁵

Character (word)

M. 字 tzŭ⁴
S. „ z⁵
C. „ tsz²

Charcoal

M. 炭 t'an⁴
S. „ t'an⁵
C. 柴炭 ₍ch'ái (*or* ₍shái) t'án⁵

Charge (attack)

M. 衝前打 ch'ung¹ ch'ien² ta³
S. „ „ „ ts'ong zien ᶜtang
C. „ „ „ ₍ch'ung ₍ts'ín ᶜtá

Charge (entrust)

M. 寄託 chi⁴ t'o¹
S. 託 t'auh
C. 付託 fú² t'ok₀

—— **(accuse)**

M. 告 kao⁴; 告狀 kao⁴ chuang⁴
S. (1) kau⁵; (2) kau⁵ zaung⁵
C. (1) kò⁵

Cheap

M. 便宜 p'ien²-i; 賤 chien⁴
S. „ „ bien⁵ nyi; „ dzien⁵
C. 平 ₍p'eng†

Cheek

M. 腮頰 sai¹-chia
S. 面 „ mien⁵ kyih
C. 腮 „ ₍soi káp₀

Cheese

M. 奶餅 nai³ ping³
S. „ „ ᶜna ᶜping
C. 牛奶餅 ₍ngaú ᶜnái ᶜpeng†

Chicken

M. 小鷄 hsiao³ chi¹
S. „ „ ᶜsiau kyi
C. 鷄仔 ₀kai ᶜtsai

Chief

M. (head) 頭目 t'ou²-mu; (first) 第一 ti⁴ i¹

Chief (*continued*)

S. (head) 頭目 deu mok; (first) 頭一个 deu ih kuh; (2) di˒ ih

C. (1) ˩t'aú muk˧; 頭人 ˩t'aú ˩yan; (2) tai² yat˩

—— **of a society**

M. 會首 hui⁴ shou³; 會主 hui⁴ chu³

S. „ „ we˒ ˓seu

C. „ „ wúi² ˓shaú

Children

M. 孩子們 hai²-tzŭ mên; 兒女 erh² nü³

S. 小囝 ˓siau noen; (2) r ˓nyui

C. 細蚊仔 sai˒ ˬman ˓tsai

Chimney

M. 烟筒 yen¹ t'ung

S. „ 囪 ien ts'ong

C. „ 通 ˩yín ˩t'ung

Chin

M. 下巴頦兒 hsia⁴ pa ko¹'rh

S. „ „ ˓au bo

C. „ 爬 há² ˩p'á

China

M. 中國 chung¹ kuo

S. „ „ tsong kok

C. „ „ ˩chung kwokˬ

Chinese

M. 中國人 chung¹ kuo jên²; 漢人 han⁴ jên²

S. (1) tsong kok nyung; (2) hoen˒ nyung

C. (1) ˩chung kwokˬ ˩yan; 唐人 ˩t'ong ˩yan

Cholera

M. 癨亂 huo⁴ luan⁴

S. „ „ hauh loen˒

C. „ „ 症 fokˬ lün² ching˒

Choose

M. 揀選 chien³ hsüan³; 挑 t'iao¹

S. (1) ˓kan ˓sien; (2) t'iau

C. (1) ˓kán ˓sün

Chopsticks

M. 筷子 k'uai⁴-tzŭ

S. „ kw'an

C. 快子 fái˒ ˓tsz

Christianity (R.C.)

M. 天主教 t'ien¹-chu³ chiao⁴

S. „ „ „ t'ien ˓tsu kyau˒

C. „ „ „ ˩t'ín ˓chü káú˒

—— **(Protestant)**

M. 耶穌教 yeh³-su¹ chiao⁴

S. „ „ „ ya soo kyau˒

C. „ „ „ ye² ˩sò káú˒

Church

M. 禮拜堂 li³-pai⁴ t'ang²; 天主堂 t'ien¹-chu³ t'ang²

S. (1) ᶜli paᵓ daung; (2) t'ien ᶜtsu daung

C. (1) ᶜlai páiᵓ ˍt'ong; (2) ˌt'ín ᶜchü ˍt'ong

—— **(Christian body)**

M. 教會 chiao⁴ hui⁴

S. „ „ kyauᵓ weᵓ

C. „ „ káúᵓ wúi²

Circle

M. 圓圈 yüan² ch'üan¹

S. „ „ yoen choen

C. 圈 ˌhün

Diameter of a ——

M. 圓徑 yüan² ching⁴

S. „ „ yoen ᶜkyung

C. „ „ ˍyün kingᵓ

Circumstances

M. 光景 kuang¹-ching

S. „ „ kwaung ᶜkyung; 情形 dzing yung

C. „ „ ˌkwong ᶜking

Act according to ——

M. 按光景做 an⁴ kuang¹-ching³ tso⁴

S. 看情形做 k'oenᵓ dzing yung tsooᵓ

C. (1) onᵓ ˌkwong ᶜking tsò²; 照景做 chíúᵓ ᶜking tsò²

City

M. 城 ch'êng²

S. „ dzung

C. „ ˍsheng†

District ——

M. 縣城 hsien⁴ ch'êng²

S. „ „ yoenᵓ dzung

C. „ „ yün² ˍsheng†

Prefectural ——

M. 府城 fu³ ch'êng²

S. „ „ ᶜfoo dzung

C. „ „ ᶜfú ˍsheng†

Provincial ——

M. 省城 shêng³ ch'êng²

S. „ „ ᶜsang dzung

C. „ „ ᶜsháng ˍsheng†

Clean

M. 乾淨 kan¹-ching

S. „ „ koen zingᵓ

C. „ „ ˌkon tseng²†

To make ——

M. 弄乾淨 nung⁴ kan¹-ching

S. „ „ „ longᵓ koen zingᵓ

C. 整 „ „ ᶜching ˌkon tseng²†

Clear

M. 清 ch'ing¹; 明白 ming² pai

S. „ ts'ing; 清楚 ts'ing ts'ooᵓ

C. „ ˌts'ing; (2) ˍming

Clear sky

M. 天晴 t'ien[1] ch'ing[2]
S. „ „ t'ien dzing
C. „ „ ˌt'ín ˌts'ing

To —— the way

M. 開路 k'ai[1] lu[4]; 喝道 ho[1] tao[4]
S. (1) k'e loo˃; (2) hoeh ˂dau
C. (1) ˌhoi lò[2]; (2) hotₒ tò[2]

Climate

M. 水土 shui[3]-t'u[3]
S. „ „ ˂s ˂t'oo
C. „ „ ˂shui ˩t'ò

Climb

M. 爬 p'a[2]
S. „ bo
C. 攙 ˩k'am

To —— a tree

M. 扒樹 p'a[2] shu[4]
S. „ „ bo zu˃
C. 攙(上)樹 ˩k'am (˩shöng) shü[2]

Clock

M. 鐘 chung[1]
S. „ tsong
C. „ ₒchung

Three o'clock

M. 三點鐘 san[1] tien[3] chung[1]
S. „ „ „ san ˂tien tsong
C. „ „ „ ˌsám ˂tím ₒchung

Close

M. 關 kuan[1]
S. „ kwan
C. „ ˌkwán

To —— the door

M. 關門 kuan[1] men[2]
S. „ „ kwan mung
C. „ „ ˌkwán ˩mún; 掩埋門 ˂yím ˩mái ˩mún

To —— the frontier

M. 封疆 fêng[1] chiang[1]
S. „ „ fong kyang
C. „ „ ˌfung ˌköng

To keep a —— watch

M. 守得緊 shou[3] tê chin[3]
S. 看 „ „ k'oen˃ tuh ˂kyung
C. 守 „ „ ˂shaú tak˩ ˂kan

Cloth (cotton)

M. 布 pu[4]
S. „ poo˃
C. (棉)布 (˩mín) pò˃

Grass ——

M. 夏布 hsia[4] pu[4]
S. „ „ 'au˃ poo˃
C. „ „ há[2] pò˃

Oil ——

M. 油布 yu[2] pu[4]
S. „ „ yeu poo˃
C. „ „ ˩yaú pò˃

Cloth, woollen

M. 絨 jung^{2}; 呢 ni^{2}
S. „ nyong; „ nyi
C. „ ˏyung*

Table ——

M. 檯布 t'ai^{2} pu^{4}
S. „ „ de poo˃
C. „ „ ˏt'oi* pò˃

Clothes

M. 衣裳 i^{1}-shang^{1}; 衣服 i^{1}-fu
S. (1) i zaung
C. (1) ˏyí ˏshöng; (2) ˏyí fuk$_{2}$

To put on ——

M. 穿衣裳 ch'uan^{1} i^{1}-shang^{1}
S. 着 „ „ tsak i zaung
C. „ „ 服 chök$_{o}$ ˏyí fuk$_{2}$

To take off ——

M. 脫衣裳 t'o^{1} i^{1}-shang^{1}
S. „ „ „ t'oeh i zaung
C. „ „ „ t'üt$_{o}$ ˏyí ˏshöng

To change ——

M. 換衣裳 huan^{4} i^{1}-shang^{1}
S. „ „ „ wen i zaung
C. „ „ „ ˏwún ˏyí ˏshöng

Clouds

M. 雲彩 yün^{2}-ts'ai
S. „ yuin
C. „ ˏwan

Cloudy (day)

M. 陰天 yin^{1} t'ien^{1}
S. „ „ iung t'ien
C. „ „ ˏyam ˏt'ín

Coal

M. 煤 mei^{2}
S. „ me
C. 炭 t'án˃; 煤炭 ˏmúi t'án˃

Coarse

M. 粗 ts'u^{1}
S. „ ts'oo
C. „ ˏts'o

Coast

M. 海邊 hai^{3} pien^{1}
S. „ „ ʿhe pien
C. „ „ ʿhoi ˏpín

Coat

M. 褂子 kua^{4}-tzŭ
S. 馬褂 ʿmo kwo˃
C. 衫 ˏshám

Over ——

M. 大褂子 ta^{4} kua^{4}-tzŭ
S. 外套 nga˃ t'au˃; 大衣 doo˃ i
C. 大衫 tái^{2} ˏshám

—— (of paint)

M. 一層 i^{1} ts'êng^{2}
S. „ „ ih dzeng
C. 浸 cham˃

Coffee

M. 咖啡 ka¹-fei
S. „ „ k'a fi
C. „ „ ká˩ ˌféi

Coffin

M. 棺材 kuan¹-ts'ai
S. „ „ kwen ze
C. „ „ ˌkwún ˏts'oi

Cold

M. 冷 lêng³
S. „ ˥lang
C. „ ˥láng

Catch ——

M. 傷風 shang¹ fêng¹
S. „ „ saung fong
C. „ „ ˌshöng ˌfung

—— water

M. 凉水 liang² shui³
S. 冷 „ ˥lang ˥s
C. 凍 „ tung˩ ˥shui

Collar

M. 領子 ling³-tzŭ
S. „ 頭 ˥ling deu
C. 頸領 ˥keng ˥leng†

Horse ——

M. 套包子 t'ao⁴ pao¹-tzŭ
S. 馬領圈 ˥mo ˥ling choen
C. 馬軛 ˥má ákₒ

Collect

M. 湊 ts'ou⁴; 聚 chü⁴; 積 chi¹; 會集 hui⁴-chi²
S. (1) ts'eu˩; (2) ˥dzui; (3) dzih; (4) we˩ dzih
C. (2) tsui²; (3) tsikₒ; 聚集 tsui² tsápₒ

—— together

M. 湊在一塊兒 ts'ou⁴ tsai⁴ i¹ k'uai⁴ 'rh
S. 聚攏 ˥dzui ˥long; 聚在一起 ˥dzui ˥dze ih ˥chi
C. 聚埋 tsui² ˏmái

Collision

M. 相碰 hsiang¹ p'êng⁴; 撞碰 ch'o¹ p'êng⁴
S. (1) siang bang˩
C. (1) ˏsöng p'ung˩; 揸親 tím˩ ˌts'an

Colloquial

M. 俗話 su²-hua
S. „ „ dzok wo˩; 土白 ˥t'oo bak
C. „ „ tsukₒ wá²*

Colonel

M. 參將 ts'an¹-chiang¹; 正參領 chêng⁴ ts'an¹-ling³; 陸軍上校 lu⁴ chün¹ shang⁴ hsiao⁴
S. (1) ts'en tsiang˩; (2) tsung˩ ts'en ˥ling; (3) lok kyuin zaung chiau
C. (1) ˌts'ám tsöng˩; (3) lukₒ ˌkwan ˏshöng háú²

Colonel, Lieutenant

M. 副參領 fu⁴ ts'an ling; 陸軍中校 lu⁴ chün¹ chung¹ hsiao⁴

S. (1) foo ts'en ˈling; (2) lok kyuin tsong chiau

C. (1) fú˒ ˌts'ám ˈling; (2) luk₂ ˌkwan ˌchung háu²

Colour

M. 色 sê⁴; 顏色 yen²-sê⁴

S. „ suh; „ „ ngan suh

C. „ shik₅; „ „ ˌngán shik₅

To hoist a ship's colours

M. 升旗 shêng¹ ch'i²

S. 扯 „ ˈts'a ji

C. 升船旗號 ˌshing ˌshün ˌk'éi hò²

Come

M. 來 lai²

S. „ le

C. 嚟 ˌlai

Has he —— ?

M. 來了沒有 lai² lo mei² yu³

S. 伊來哉否 yí le tse va˒

C. 嚟唔曾呢 ˌlai ˌm ˌts'ang ˌni

To —— back

M. 回來 hui² lai²

S. „ „ we le

C. 翻嚟 ˌfán ˌlai

Just come

M. 剛來了 kang¹ lai² lo

S. „ „ „ kaung le liau

C. 啱啱嚟到 ˌngám ˌngám ˌlai tò˒

Comfortable

M. 舒服 shu¹-fu

S. „ „ seu vok

C. „ „ ˌshü fuk₂; 安樂 ˌon lok₂

Command (sb.)

M. 命 ming⁴; 命令 ming⁴ ling⁴

S. (1) ming˒; (2) ming˒ ling˒

C. (1) ming²; (2) ming² ling²

Word of ——

M. 號令 hao⁴ ling⁴

S. „ „ 'au˒ ling˒

C. „ „ hò² ling²

Issue ——

M. 下令 hsia⁴ ling⁴

S. 出 „ ts'eh ling˒

C. „ 命 ch'ut₅ ming²

—— (vb.)

M. 吩咐 fên¹-fu; 令 ling⁴

S. „ „ fung foo˒

C. „ „ ˌfan fú˒

—— **(an army)**

M. 統帶 t'ung³ tai⁴

S. „ 領 ˈt'ong ˈling

C. „ 帶 ˈt'ung tái˒

Commander (of an army)

M. 將軍 chiang[1]-chün[1]; 總司令 tsung[3] ssŭ ling

S. (1) tsiang' kyuin; (2) 'tsong s ling'

C. (1) ˌtsöng ˌkwan; (2) 'tsung ₀sz ling[2]

—— -in-chief

M. 元帥 yüan[2]-shuai

S. ,, ,, nyoen se'

C. ,, ,, ˌyün shui'

Commerce

M. 通商 t'ung[1]-shang[1]; 貿易 mao[4]-i[4]

S. (1) t'ong saung; 交易 kyau yuh

C. (1) ˌt'ung ˌshöng; (2) maú[2] yik₂

Commission (an officer's)

M. 官照 kuan[1] chao[4]

S. ,, ,, kwen tsau'

C. ,, ,, ˌkwún chíú'

—— (money)

M. 經紀抽分 ching[1]-chi[4] ch'ou[1] fên[1]; 花銷 hua[1]-hsiao

S. 買賣經紀 'ma ma' kyung kyi'; 扣頭 k'eu' de

C. 用銀 yung[2]* ˌngan

Commission (vb.)

M. 差委 ch'ai[1]-wei[3]; 託 t'o[1]

S. 委託 ᶜ'we t'auh; 差派 ts'a; p'a'

C. (1) ˌch'ái 'wai; 委託 'wai t'ok₀

Commissioner of Customs

M. 稅務司 shui[4] wu[4] ssŭ[1]

S. ,, ,, ,, soe' voo' s

C. ,, ,, ,, shui' mò[2] ₀sz

Common (public)

M. 公 kung[1]

S. ,, kong

C. ,, ˌkung; 公衆 ˌkung chung'

—— (usual)

M. 平常 p'ing[2]-ch'ang[2]

S. ,, ,, bing dzang

C. ,, ,, ˌp'ing shöng[2]

—— saying

M. 俗語 su[2] yü[3]

S. ,, ,, dzok 'nyui

C. ,, ,, tsuk₂ ˌyü

Communication (official)

M. 照會 chao[4]-hui[4]

S. ,, ,, tsau' we'

C. ,, ,, chíú' wúi[2]

—— (to higher officer)

M. 稟報 ping[3] pao[4]

S. 報告 pau' kau'

C. 稟報 'pan pò'; 稟告 'pan kò'

Communication (passage)
M. 通路 t'ung[1] lu[4]
S. „ „ t'ong loo'
C. „ „ ˌt'ung lò

Company (mil.)
M. 隊 tui[4]
S. „ de'
C. „ tui[2]

Ship's ——
M. 船家 ch'uan[2] chia[1]
S. „ „ sen kya
C. „ 上夥計 ˌshün shöng[2] ˈfo kéi'

A public ——
M. 公司 kung[1]-ssŭ[1]
S. „ „ kong s
C. „ „ ˌkung ˌsz

Insurance ——
M. 保險公司 pao[3]-hsien[3] kung[1]-ssŭ
S. „ „ „ „ ˈpau ˈhyien kong s
C. „ „ „ „ ˈpò ˈhím ˌkung ˌsz

Compass (mariner's)
M. 指南車 chih[3] nan[2] ch'ê[1]; 羅盤 lo[2] p'an[2]
S. 羅經 loo kyung
C. (2) ˍlo ˍp'ún

Compass, needle of a
M. 指南針 chih[3] nan[2] chên[1]
S. „ „ „ ˈts nen tsung
C. 方針 ˌfong ˌcham

Compel
M. 勒令 lê[2] ling[4]; 强逼 ch'iang[2]-pi[1]
S. (2) ˈchang pih; 勉强 ˈmien ˈchang
C. 勉强 ˍmín ˍk'öng

Compensate
M. 補 pu[3]; 賠償 p'ei[2] ch'ang[2]
S. (1) ˈpoo; (2) be dzaung
C. 賠補 ˍp'úi ˈpò

Complain
M. 訴怨 su[4] yüan[4]; 控告 k'ung[4] kao[4]
S. (1) soo' ioen'; 告訴 kau' soo'
C. (1) sò' ˌyün

Complete (adj.)
M. 成全 ch'êng[2] ch'üan[2]; 十分 shih[2] fên[1]
S. (1) dzung dzien'; (2) zeh fung
C. 周全 ˌchaú ˍts'ün; 十全 shapˍ ˍts'ün

Complete (vb.)

M. 成就 ch'êng^{2} chiu^{4}; 完 wan^{2}

S. (1) dzung dzieu^{5}; (2) wen

C. 成 ⸢shing; 做成 tsò^{2} ⸢shing

To —— an affair

M. 成事 ch'êng^{2} shih^{4}

S. 做成功 tsoo^{5} dzung kong

C. 成事 ⸢shing sz^{2}

Compradore

M. 買辦 mai^{3}-pan

S. ,, ,, ᶜma ban^{5}

C. ,, ,, ⸢mái pán^{2}*

Condemn

M. 定罪 ting^{4} tsui^{4}

S. ,, ,, ding^{5} ᶜdzoe

C. ,, ,, ting^{2} tsui^{2}

—— to death

M. 定死罪 ting^{4} ssŭ^{3} tsui^{4}

S. ,, ,, ,, ding^{5} ᶜsi ᶜdzoe

C. ,, ,, ,, ting^{2} ᶜsz tsui^{2}

Conduct

M. 行爲 hsing^{2}-wei; 作爲 tso^{4}-wei

S. (1) ᶜang we; 品行 p'ing yung^{5}; 舉動 ᶜkyui ᶜdong

C. (1) ⸢háng ⸢wai

Conduct (vb.)

M. 引導 yin^{3} tao^{4}; 送 sung^{4}

S. (1) ᶜiung dau^{5}; 領 ᶜling

C. 引帶 ⸢yan tái^{5}; (2) sung^{5}

Confess

M. 承認 ch'êng^{2} jên^{4}

S. ,, ,, dzung nyung^{5}

C. 認 ying^{2}

Confucius

M. 孔夫子 k'ung^{3}-fu-tzŭ^{3}

S. ,, ,, ,, k'ong foo ᶜts

C. ,, ,, ,, ⸢hung ⸢fú ᶜtsz

Confusion

M. 雜亂 tsa^{2} luan^{4}

S. ,, ,, zeh loen^{5}

C. 亂 lün^{2}

Connected

M. 相連 hsiang^{1} lien^{2}

S. ,, ,, siang lien

C. ,, ,, ⸢söng ⸢lín; 連埋 ⸢lín ⸢mái

—— (by road, &c.)

M. 相通 hsiang^{1} t'ung^{1}

S. 通 t'ong

C. 相通 ⸢söng ⸢t'ung

Conquer

M. 勝 shêng^{4}; 贏 ying^{2}

S. ,, sung^{5}; ,, yung

C. ,, ⸢shing; ,, ⸢yeng†

Consent (vb.)

M. 允 yün³; 允准 yün³-chun³

S. 答應 teh iung⁾; (1) ᶜiuin; (2) ᶜiuin ᶜtsung

C. (2) ᶜwan ᶜchun; 允肯 ᶜwan ᶜhang

Will never ——

M. 終不肯 chung¹ pu kʻên³; 總不允 tsung³ pu yün³

S. 終勿肯 tsong ʼveh ᶜkʻung

C. 永遠不肯 ᶜwing ᶜyün pat, ᶜhang

Consider

M. 思想 ssŭ¹ hsiang³; 想一想 hsiang³ i hsiang³

S. (1) s ᶜsiang; (2) ᶜsiang ih ᶜsiang

C. (1) ˌsz ᶜsöng

Constable

M. 巡捕 hsün²-pu; 捕役 pu³ i⁴

S. (1) dzing boo⁾; 捕快 boo⁾ kʻwa⁾

C. 差人 ˌchʻái ˌyan; 差役 ˌchʻái yik₂

—— **(Chinese headman)**

M. 地保 ti⁴-pao³

S. ,, ,, di⁾ ᶜpau

C. ,, ,, téi² ᶜpò

Consul

M. 領事官 ling³ shih kuan¹

S. ,, ,, ,, ᶜling z⁾ kwen

C. ,, ,, ,, ᶜling sz² ˌkwún

Acting ——

M. 署領事官 shu³ ling³ shih kuan¹

S. ,, ,, ,, ,, dzui⁾ ᶜling z⁾ kwen

C. ,, ,, ,, ,, ᶜchʻü (理 ᶜléi) ᶜling sz² kwún

Vice ——

M. 副領事官 fu⁴ ling³ shih kuan¹

S. ,, ,, ,, ,, foo⁾ ᶜling z⁾ kwen

C. ,, ,, ,, ,, fú² ᶜling sz² kwún

Content

M. 心滿 hsin¹-man³; 自在 tzŭ⁴-tsai⁴

S. (1) sing ᶜmen; (2) z⁾ ᶜdze

C. 心足 ˌsam tsuk,; 知足 ˌchí tsuk,; 滿意 ᶜmún yf⁾

Continue

M. 不絕 pu⁴ chüeh²

S. 勿斷 ʼveh ᶜdoen

C. 照常 chíú⁾ ˌshöng; 接續 tsípₒ tsuk₂

To continue without interruption

M. 接連不斷 chieh[1] lien[2] pu[4] tuan[4]
S. ,, ,, 勿歇 tsih lien 'veh hyih
C. 連作不止 ˌlín tsokₒ patˌ ˈchí

Contract (sb.)

M. 約單 yüeh[1]-tan[1]; 合同 ho[2]-t'ung
S. (1) iak tan; (2) ˈeh dong
C. (2) hopₒ ˌt'ung*

—— (vb.)

M. 立約 li[4] yüeh[1]
S. ,, ,, lih iak
C. ,, ,, láp₂ yök₂

To —— to do

M. 包辦 pao[1] pan[4]
S. ,, ,, pau ban'
C. 接承嘹做 tsípₒ ˌshing ˌlaí tsò[2]

Convenient

M. 方便 fang[1] pien
S. 便當 bien' taung'
C. 方便 ˌfong pín[2]

Convince

M. 辯倒 pien[4] tao[3]; 問倒 wên[4] tao[3]
S. 說倒 seh ˈtau; 說服 seh vok
C. 辯明白 pín[2] ˌming pák₂

Convince, unable to

M. 講不過 chiang[3] pu kuo[4]
S. 說勿服 seh 'veh vok; 講勿過 ˈkaung-'veh koo'
C. 辯不贏 pín[2] patˌ ˌyeng †

Convoy (vb.)

M. 護送 hu[4] sung[4]
S. ,, ,, 'oo' song'
C. ,, ,, wú[2] sung'

Cook (sb.)

M. 廚子 ch'u[2]-tzŭ
S. ,, ,, dzu ˈts
C. 做廚 tsò[2] ˌch'ü*; 伙頭 ˈfo ˌt'aú*

—— (vb.)

M. 煮 chu[3]
S. 燒 sau
C. 煮 ˈchü

Cool

M. 凉 liang[2]
S. ,, liang
C. ,, ˌlöng

Coolie

M. 苦力 k'u[3]-li[4]; 挑夫 t'iao[1] fu
S. 小工 ˈsiau kong; 脚夫 kyak foo
C. 咕哩 ₒkwú ₒléi; 管店 ˈkwún tím'*

Copper

M. 銅 t'ung²
S. „ dong
C. „ ˩t'ung

Copy (vb.)

M. 抄寫 ch'ao¹ hsieh³; 謄寫 t'êng² hsieh³
S. (1) ts'au ˥sia; (2) dung ˥sia
C. (1) ˩ch'áú ˥se

Cord

M. 繩子 shêng²-tzŭ
S. „ 頭 zung deu
C. „ ˩shing

Cork (of a bottle)

M. 塞子 sai⁴-tzŭ
S. „ 頭 suh deu
C. 鱒枳 ˩tsun chat˩

Corkscrew

M. 鑽子 tsuan¹-tzŭ
S. „ „ tsoe ˥ts
C. 酒鑽 ˥tsaú tsün˧

Corn

M. 穀 ku³; 糧食 liang²-shih²
S. (1) kok; (2) liang zuh
C. (1) kuk˩; (2) ˩löng shik˩

Indian ——

M. 玉米 yü⁴-mi
S. 珍珠米 tsung tsu ˥mi
C. 粟米 suk˩ ˥mái

Corner

M. 角 chiao³
S. „ kauh
C. „ 頭 kok˳ ˩t'aú*

Three-cornered

M. 三角的 san¹-chiao³-ti
S. „ „ 个 san kauh kuh
C. „ „ ˩sám kok˳

Corns (on the foot)

M. 雞眼 chi¹ yên
S. „ „ kyi ˥ngan
C. „ „ ˩kai ˥ngán

Corpse

M. 尸首 shih¹-shou
S. „ „ s ˥seu
C. 屍 ˩shí

Correct (adj.)

M. 正直 chêng⁴-chih²; 不錯 pu² ts'o⁴
S. (1) tsung˧ dzuh; 勿錯 'veh ts'o
C. (1) ching˧ chik˩; 冇錯 ˥mò ts'o˧

—— (vb.)

M. 改正 kai³-chêng
S. „ „ ˥ke tsung˧
C. „ „ ˥koi cheng˧†

Cost

M. 價錢 chia⁴-ch'ien
S. „ „ ˥ka dien
C. „ „ ká˧ ˩ts'ín

What does it cost?

M. 價錢多少 chia⁴-ch'ien to¹-shao³

S. 啥價錢 sa' ᶜka dien

C. 幾多價錢呢 ᶜkéi ₒto ká' ₍ts'ín ₍ni

Cotton (raw)

M. 棉花 mien²-hua

S. ,, ,, mien hwo

C. ,, ,, ₍mín ₍fá

—— cloth

M. 布 pu⁴

S. ,, poo'

C. 棉布 ₍mín pò'

Sewing ——

M. 棉線 mien² hsien⁴

S. ,, ,, mien sien'

C. ,, ,, ₍mín sín'

Count

M. 數 shu³; 算 suan⁴

S. ,, ᶜsoo; ,, soen'

C. ,, ᶜsho; ,, sün'

Country

M. 國 kuo²

S. ,, kok

C. ,, kwokₒ

Foreign ——

M. 外國 wai⁴ kuo²

S. ,, ,, nga' kok

C. ,, ,, ngoi² kwokₒ

Country, one's native

M. 本國 pên³ kuo²

S. ,, ,, ᶜpung kok

C. ,, ,, ᶜpún kwokₒ

To go into the ——

M. 到鄉下去 tao⁴ hsiang¹-hsia ch'ü⁴

S. ,, ,, ,, ,, tau' hyang ᶜ'au chi'

C. 落鄉 lok₂ ₍höng

Course

M. 道 tao⁴; 路 lu⁴

S. ,, dau'; ,, loo'

C. ,, tò²; ,, lò²; tò²-lò²

Of ——

M. 自然 tzŭ⁴-jan²

S. ,, ,, z' zen

C. ,, ,, tsz² ₍yín

Cover (sb.)

M. 蓋兒 kai⁴-'rh

S. ,, 頭 ke' deu

C. ,, koi'

—— (vb.)

M. 蓋上 kai⁴-shang

S. ,, 好 ke' ᶜhau

C. ,, 住 koi' chü²

Cow

M. 牛 niu²; 母牛 mu³ niu²

S. ,, nyeu; (2) ᶜmoo nyeu

C. ,, ₍ngaú; 牛嫲 ₍ngaú ᶜná

Cow, to milk a

M. 擠奶 chi³ nai³
S. 捋 „ loeh ᶜna
C. 搾 „ ᶜchá ᶜnái

Crawl

M. 趴 p'a²; 爬 p'a²
S. „ bo
C. 躝 ᶜlán; 爬行 ᶜp'á ᶜháng†

Creature

M. 生物 shêng¹ wu⁴; 禽獸 ch'in² shou⁴
S. „ „ sung veh; (2) jung seu⁾
C. (1) ᶜsháng mat₂

Crew (ship's)

M. 船上水手 ch'uan²shang shui³ shou³
S. „ „ „ „ zen ᶜzaung ᶜs ᶜseu
C. „ „ „ „ ᶜshün shöng² ᶜshui ᶜshaú

Crime

M. 罪 tsui⁴; 罪過 tsui⁴kuo⁴
S. „ dzoe; „ „ dzoe koo⁾
C. „ tsui²; „ „ tsui² kwo⁾

To commit a capital ——

M. 犯死罪 fan⁴ ssŭ³ tsui⁴
S. „ „ „ ᶜvan ᶜsi ᶜdzoe
C. „ „ „ fán² ᶜsz tsui²

Cross

M. 過 kuo⁴; 渡 tu⁴
S. „ koo⁾
C. „ kwo⁾

To cross a river

M. 過河 kuo⁴ ho²; 渡河 tu⁴ ho²
S. (1) koo⁾ ᶜoo; (2) doo⁾ ᶜoo
C. (1) kwo⁾ ᶜho

Crowd (vb.)

M. 擁擠 yung³ chi³
S. „ „ iong tsi
C. 擠擁 ᶜtsai ᶜyung

A —— of people

M. 一群人 i ch'ün² jên²
S. „ „ „ ih juin nyung
C. „ „ „ yat₅ ᶜk'wan ᶜyan

Cruel

M. 殘虐 ts'an² nüeh⁴
S. 暴虐 bau⁾ nyak; 凶惡 hyong auh
C. 殘忍 ᶜts'án ᶜyan

Cultivate

M. 耕種 kêng¹ chung⁴
S. „ „ kung tsong⁾
C. „ „ ᶜkáng chung⁾

To —— land

M. 種地 chung⁴ ti⁴
S. „ „ tsong⁾ di⁾
C. „ „ chung⁾ téi²

Cup

M. 杯 pei¹; 鍾子 chung¹-tzŭ; 碗 wan³
S. (1) ᶜpe; (2) dzong ᶜts; (3) ᶜwen
C. (1) ₀pui

A cup of tea

M. 一碗茶 i wan³ ch'a²
S. ,, ,, ,, ih ᶜ'wen dzo
C. ,, 杯茶 yat, ᶜpui ᶜch'á

Cure (vb.)

M. 治好 chih⁴ hao³
S. 醫 ,, i ᶜhau
C. ,, ,, ᶜyí ᶜhò

Custom

M. 規矩 kuei¹-chü ; 風俗 fêng¹-su
S. (1) kwe ᶜkyui ; (2) fong dzok
C. (1) ᶜk'wai ᶜkui; (2) ᶜfung tsuk,

—— House

M. 稅關 shui⁴ kuan¹
S. ,, ,, soeᵓ kwan
C. ,, ,, shuiᵓ ᶜkwán

Customs (maritime)

M. 海關 hai³ kuan¹
S. ,, ,, ᶜhe kwan
C. ,, ,, ᶜhoi ᶜkwán

Commissioner of ——

M. 稅務司 shui⁴ wu⁴ ssŭ¹
S. ,, ,, ,, soeᵓ vooᵓ s
C. ,, ,, ,, shuiᵓ mòᵓ ₒsz

Inspector General of ——

M. 總稅務司 tsung³shui⁴ wu⁴ ssŭ¹
S. ,, ,, ,, ,, ᶜtsong soeᵓ vooᵓ s
C. ,, ,, ,, ,, ᶜtsung shuiᵓ mòᵓ ᶜsz

Customs, superintendent of (Chinese)

M. 海關監督 hai³ kuan¹ chien¹-tu
S. ,, ,, ,, ,, ᶜhe kwan ᶜkan tok
C. ,, ,, ,, ,, ᶜhoi ᶜkwán ᶜkám tuk,

To levy —— duties

M. 徵稅 chêng¹ shui⁴
S. 收 ,, seu soeᵓ
C. 徵 ,, ᶜching shuiᵓ; 抽關稅 ᶜch'aú ᶜkwán shuiᵓ

To pay —— duties

M. 完稅 wan² shui⁴
S. ,, ,, wen soeᵓ
C. ,, ,, ᶜyün shuiᵓ

Cut

M. 割 ko¹; 切 ch'ieh⁴; 剌 la²
S. (1) koeh ; (2) ts'ih
C. (1) kot,; (2) ts'ít,

To —— grass

M. 割草 ko¹ ts'ao³
S. ,, ,, koeh ᶜts'au
C. ,, ,, kot, ᶜts'ò

To —— down a tree

M. 砍樹 k'an³ shu⁴
S. 斬 ,, tsan zuᵓ
C. ,, 斫樹 ᶜchám ᶜp'o shü²

To cut a channel

M. 開溝 k'ai[1] kou[1]
S. ,, ,, k'e keu
C. ,, ,, ˌhoi ˌkaú

Daily

M. 天天 t'ien[1] t'ien[1]; 每天 mei[3] t'ien[1]
S. 日日 nyih nyih; 每日 ᶜme nyih
C. 日日 yat$_2$ yat$_2$; 每日 ˢmúi yat$_2$

—— **newspaper**

M. 日報 jih[4] pao[4]
S. ,, ,, nyih pau^2
C. ,, ,, yat$_2$ pò^2

Damage

M. 損傷 sun[3] shang[1]; 損害 sun[3] hai[4]
S. (1) sung^2 saung; 傷害 saung 'e^2
C. (1) ᶜsün ˌshöng; (2) ᶜsün hoi^2; 損壞 ᶜsün wái^2

Damp

M. 潮濕 ch'ao[2] shih[1]
S. ,, ,, dzau sak
C. ,, ,, ˌch'íú shap$_5$; 濕 shap$_5$

Danger

M. 危險 wei[2] hsien[3]
S. ,, ,, we ᶜhyien
C. ,, ,, ˌngai ᶜhím

Danger, to run into

M. 冒險 mao[4] hsien[3]
S. ,, ,, mau^2 ᶜhyien
C. ,, ,, mò^2 ᶜhím

Dare

M. 敢 kan[3]
S. ,, ᶜken
C. ,, ᶜkom

Dark

M. 黑 hei[1]; 暗黑 an[4]-hei[1]
S. ,, huh; 黑暗 huh en^2
C. ,, hak$_5$

It will soon be ——

M. 快黑了 k'uai[4] hei[1] lo
S. 就要黑哉 zieu^2 iau^2 huh tse
C. 冇耐黑咯 ˢmò noi^2* hak$_5$ lok$_5$

Date (fruit)

M. 棗兒 tsao[3] 'rh
S. ,, 子 ᶜtsau ᶜts
C. 蜜棗 mat$_2$ ᶜtsò

—— **(time)**

M. 日期 jih[4]-ch'i
S. ,, ,, nyih ji
C. ,, ,, yat$_2$ ˌk'éi

Daughter

M. 女兒 nü[3]-'rh
S. 囡 noen^2; 小姐 ᶜsiau ᶜtsia
C. 女 ˢnui

Dawn

M. 天亮 t'ien[1] liang[4]
S. ,, ,, t'ien liang
C. ,, 光 ˌt'ín ˌkwong

Day

M. 日 jih[4]; 天 t'ien[1]
S. ,, nyih; ,, t'ien
C. ,, yat$_2$ (*or* mat$_2$)

—— and night

M. 晝夜 chou[4] yeh[4]
S. ,, ,, tseu nyih
C. 日 ,, yat$_2$ ye[2]

All ——

M. 整天 chêng[3] t'ien[1]
S. ,, 日 tsong nyih
C. 成 ,, ˌsheng† yat$_2$

Every other ——

M. 隔一天 ko[2] i t'ien[1]
S. 間日 kan˃ nyih
C. 每踹日 ˇmúi lám˃ yat$_2$

Dead

M. 死了 ssŭ[3] lo; 不在 pu[2] tsai[4]
S. ,, 哉 ˇsi tse; 過世 koo˃ s˃
C. ,, 曉 ˇsz ˌhiú; (2) pat$_2$ tsoi[2]

Deaf

M. 聾 lung[2]
S. ,, 彭 long bang
C. ,, ˌlung; 耳聾 ˇyí ˌlung

A deaf man

M. 聾子 lung[2]-tzŭ
S. ,, ,, long ˇts
C. ,, 佬 ˌlung ˧lò

Dear (price)

M. 貴 kuei[4]; 價高 chia[4] kao[1]
S. ,, kyui˃; 價錢大 ka˃ dien doo˃
C. ,, kwai˃

Death

M. 死 ssŭ[3]
S. ,, ˇsi; 亡 vaung
C. ,, ˇsz

Debt

M. 債 chai[4]
S. ,, tsa˃
C. ,, chái˃; 欠項 hím˃ hong[2]

In ——

M. 欠債 ch'ien[4] chai[4]
S. ,, ,, chien˃ tsa˃
C. ,, ,, hím˃ chai˃; 欠人錢 hím˃ ˌyan ˌts'ín*

Deceive

M. 瞞 man[2]; 哄 hung[3]; 欺哄 ch'i[1] hung[3]
S. (1) men; 欺瞞 chi men; 騙 p'ien˃
C. 騙 p'ín˃; 瞞騙 ˌmún p'ín˃; 阨 ngak$_2$; 噤 t'am˃

December

M. 十二月 shih² êrh⁴ yüeh⁴
S. ,, ,, ,, zeh nyi⁵ nyoeh
C. 英十二月 ˌying shap₂ yí² yüt₂

Decide

M. 定規 ting⁴ kuei; 定 ting⁴
S. (2) ding⁵; 决定 kyoeh ding⁵
C. (2) ting²; 决斷 k'üt₀ tün⁵

To —— a case

M. 定案 ting⁴ an⁴
S. ,, ,, ding⁵ oen⁵
C. ,, ,, ting² on⁵

To —— unjustly

M. 枉斷 wang³ tuan⁴
S. ,, ,, ᶜ'waung toen⁵
C. ,, ,, ᶜwong tün⁵

Deck (of a ship)

M. 船面 ch'uan² mien⁴; 艙板 ts'ang¹ pan³
S. (1) zen mien⁵; (2) ts'aung ᶜpan
C. (1) ˌshün mín²*

Deep

M. 深 shên¹
S. ,, sung
C. ,, ˌsham

Defeat

M. 敗 pai⁴; 敗仗 pai⁴ chang⁴
S. ,, ba⁵; 打敗 ᶜtang ba⁵
C. (1) pái²; (2) pái² chöng⁵; 打敗 ᶜtá pái²

Defend

M. 隄防 ti¹ fang²; 防守 fang² shou³
S. (1) di baung; (2) baung ᶜseu
C. 保護 ᶜpò wú²

Degree (in astronomy or geography)

M. 度 tu⁴
S. ,, doo⁵
C. ,, tò²

—— (of latitude)

M. 緯度 wei³ tu⁴
S. ,, ,, we⁵ doo⁵
C. 地緯度 téi² ᶜwai tò²

—— (of longitude)

M. 經度 ching¹ tu⁴
S. ,, ,, kyung doo⁵
C. 地經度 téi² ˌking tò²

Delay

M. 耽擱 tan¹ ko¹; 遲延 ch'ih² yen
S. ,, ,, tan kauh
C. 遲緩 ˌch'í wún²

Deliberate (vb.)

M. 商量 shang¹ liang²; 斟酌 chên¹ cho²
S. (1) saung liang; (2) tsung tsak
C. (1) ˌshöng ˌlöng

Demand

M. 討 t'ao^3; 要 yao^4
S. „ ʿt'au; „ iau'
C. „ 取 ʿt'ò ʿts'ui

Dense

M. 密 mi^4; 稠密 ch'ou^2 mi^4
S. „ mih; 緟 „ ʿmang mih
C. (2) ˌch'aú mat$_2$

—— **foliage**

M. 樹葉森森 shu^4 yeh^4 sên^1-sên^1
S. 樹葉緟密 zu' yih ʿmang mih
C. 樹葉密 shü^2 yíp$_2$ mat$_2$

—— **smoke**

M. 稠烟 ch'ou^2 yen^1
S. 濃 „ nyong ien
C. 雲 „ ˌwan ˌyín; 雲烟稠密 ˌwan ˌyín ˌch'aú mat$_2$

Deny

M. 不認 pu^4 jên^4
S. 勿 „ 'veh nyung'
C. 不 „ pat$_5$ ying^2

Depend

M. 靠 k'ao^4; 倚賴 i^3 lai^4
S. „ k'au'; 依靠 i k'au'
C. 倚靠 ʿí-hò' (k'áu'); 靠賴 hò' (k'áu')-lái^2

Descend

M. 下去 hsia^4 ch'ü^4
S. „ „ ʿ'au chi'
C. 落 „ lok$_2$ hui'

Describe

M. 講出來 chiang^3 ch'u^1 lai^2
S. „ „ „ ʿkaung ts'eh le; 講明 ʿkaung ming
C. 指出 ʿchí ch'ut$_5$; 講清楚 ʿkong ˌts'ing ʿch'o

Desert (from the army)

M. 逃軍 t'ao^2 chün^1
S. „ „ dau kyuin
C. „ „ ˌt'ò ˌkwan

Deserter

M. 逃兵 t'ao^2 ping^1
S. „ „ dau ping
C. „ „ ˌt'ò ˌping

Despatch (noun)

M. 文書 wên^2-shu^1; 照會 chao^4-hui^4
S. (1) vung su; 公文 kong vung
C. (1) ˌman ˌshü; (2) chíú' wúi^2

Destroy

M. 滅 mieh^4; 毀壞 hui^3 huai^4
S. „ 脫 mih t'eh; (2) ʿhwe wa'
C. 毀滅 ʿwai mít$_2$

Detain

M. 留 liu²
S. „ lieu
C. „ ˌlaú

—— **by force**

M. 强留 ch'iang² liu²
S. „ „ jang lieu
C. „ „ ˌk'öng ˌlaú

Dialect

M. 土話 t'u³ hua⁴
S. „ „ ᶜt'oo wo²*; 土白 ᶜt'oo bak
C. „ „ ᶜt'ò wá²*

Local ——

M. 本地話 pên³ ti⁴ hua⁴
S. „ „ „ ᶜpung diˀ woˀ
C. „ „ „ ᶜpún téi² wá²*

Mandarin ——

M. 官話 kuan¹ hua⁴
S. „ „ kwen woˀ
C. „ „ ˌkwún wá²*

Diarrhœa

M. 瀉肚子 hsieh⁴ tu⁴-tzŭ
S. 肚子瀉 dooˀ ᶜts siaˀ
C. „ 痾 ᶜt'ò ˌo

Dictionary

M. 字典 tzŭ⁴ tien³
S. „ „ zˀ ᶜtien
C. „ „ tsz² ᶜtín

Die

M. 死 ssŭ³
S. „ ᶜsi
C. „ ᶜsz

Different

M. 不同 pu⁴ t'ung²
S. 勿 „ 'veh dong
C. 不 „ pat˩ ˌt'úng

—— **sort**

M. 別樣 pieh² yang⁴
S. „ „ bih yangˀ
C. „ „ pítₒyöng²*; 唔同樣 ˌm ˌt'ung yöng²*

Very ——

M. 差得遠 ch'a¹ tê yüan³
S. „ „ „ ts'o tuh ᶜyoen; 大不同 dooˀ peh dong
C. 差得遠 ˌch'á tak˩ ᶜyün

Difficult

M. 難 nan²
S. „ nan; 煩難 van nan
C. „ ˌnán; 惡 okₒ

Dig

M. 刨 p'ao²; 挖 wa¹
S. 掘 joeh
C. „ kwat˩

To —— trenches

M. 開壕 k'ai¹ hao²
S. „ „ k'e hau
C. 掘戰溝 kwat˩ chínˀ ˌkáú

Dine

M. 吃飯 ch'ih[1] fan[4]

S. „ „ chuh van[5]

C. 食大餐 shik$_2$ tái[2] $_0$ts'án; 食晚飯 shik$_2$ $_c$mán fán[2]

Dinner

M. 大飯 ta[4] fan[4]

S. „ „ doo[5] van[5]; 中飯 tsong van[5]

C. 大餐 tái[2] $_0$ts'án; 晚飯 $_c$mán fán[2]

Is —— ready?

M. 飯得了麼 fan[4] tê[2] lo mo

S. 飯阿曾好哉 van[5] a zung $_c$hau tse

C. 大餐便未呀 tái[2] $_0$ts'án pín[2] méi[2] á[2]

Take away the ——

M. 撤飯 ch'ê[4] fan[4]

S. 收碗盞 seu 'wen $_c$tsan

C. „ 檯 $_c$shaú $_c$t'oi*

Dirty

M. 骯髒 ang[1]-tsang

S. 齷齪 auh ts'auh

C. 汚糟 $_c$o $_c$tsò

Disappear

M. 不見了 pu[4] chien[4] lo; 沒影兒 mei[2] ying[3] 'rh

S. 勿見哉 'veh kyien[5] tse; 沒影沒踪 meh $_c$iung meh tsong

C. 唔見 $_c$m kín[5]

Discharge (a gun)

M. 放 fang[4]

S. „ faung[5]

C. „ fong[5]; 燒炮 $_c$shiú p'áú[5]

To —— a cargo

M. 卸貨 hsieh[4] huo[4]

S. „ „ sia[5] hoo[5]

C. 起 „ $_c$héi fo[5]

Discover

M. 看 (*or* 查) 出來 k'an[4] (*or* ch'a[2]) ch'u[1] lai[2]

S. 看 (*or* 查) 出來 k'oen[5] (*or* dzo) ts'eh le; 尋着 zing dzak

C. 查出 $_c$ch'á ch'ut$_5$

Unable to ——

M. 查不出來 ch'a[2] pu[4] ch'u[1] lai[2]

S. 尋勿着 sing 'veh dzak

C. 唔查得出 $_c$m $_c$ch'á tak$_5$ ch'ut$_5$

Disease

M. 病 ping[4]

S. „ bing[5]; 毛病 mau bing[5]

C. „ peng[5]†

Disease, dangerous

M. 利害的病 li⁴ hai⁴ ti ping⁴

S. ,, ,, 个毛病 li⁷ 'e⁷ kuh mau bing⁷

C. 危症 ˏngai ching⁷

Disgrace

M. 羞辱 hsiu¹ ju⁴

S. ,, ,, sieu zok

C. ,, ,, ˏsaú yuk₂

Dishonest

M. 不正經 pu⁴ chêng⁴ ching

S. 勿正經 'veh tsung⁷ kyung; 勿老實 'veh ˥lau zeh

C. 不誠實 pat₅ ˏshing shat₂; 唔眞實 ˏm ˏchan shat₂

Dismiss

M. 散 san⁴; 辭 tz'ŭ²

S. 停 ding; ,, dz

C. (1) sán⁷; 不用 pat₅ yung²

Disobey

M. 違背 wei² pei

S. ,, ,, we be⁷

C. ,, ,, ˏwai pui⁷

Distant

M. 遠 yüan³; (50 li ——) 五十里遠 wu³ shih li³ yüan³

S. ˥yoen; (50 li ——) ˥ng zeh ˥li ˥yoen

C. ˥yün; (50 li ——) ˥ng shap₂ ˥léi ˥yün

Distinguish

M. 分別 fên¹ pieh; 分明 fên¹ ming²

S. (1) fung pih; (2) fung ming

C. (1) ˏfan pít₂

District (political division)

M. 縣 hsien⁴

S. ,, yoen⁷

C. ,, yün²

—— **magistrate**

M. 知縣 chih¹ hsien⁴

S. ,, ,, ts yoen⁷

C. ,, ,, ˏchí yün²

—— **officials**

M. 地方官 ti⁴-fang kuan¹

S. ,, ,, ,, di⁷ faung kwen

C. ,, ,, ,, téi²-ˏfong ˏkwún

Ditch

M. 溝 kou¹

S. ,, keu

C. ,, ˏkaú; 溝渠 ˏkaú ˏk'ui

Divide

M. 分 fên¹; 分開 fên¹ k'ai

S. ,, fung; ,, ,, fung k'e

C. ,, ˏfan; ,, ,, ˏfan ˏhoi

Do

M. 做 tso⁴; 行 hsing²

S. ,, tsoo⁷; ,, ˥ang

C. ,, tsò²

How do you do?

M. 您好 nin^{2} hao^{3}

S. 好拉否 ʿhau laˀ va

C. 你好 ʿnéi ʿhò

It will ——

M. 可以 kʿo^{3}-i^{3}

S. „ „ ʿkʿau yi; 好个 ʿhau kuh

C. 做得 tsò^{2} tak$_{\text{D}}$; 可以 ʿho ʿyí

It will not ——

M. 不行 pu^{4} hsing^{2}

S. 勿 „ ʼveh ʿang

C. 唔做得 ˏm tsò^{2} tak$_{\text{D}}$

To —— business

M. 辦事 pan^{4} shih^{4}

S. „ „ banˀ zˀ

C. „ „ pán^{2} sz^{2}; 做生意 tsò^{2} ˏsháng yíˀ

Dock

M. 船塢 chʿuan^{2} wu^{3}; 船廠 chʿuan^{2} chʿang^{3}

S. (1) zen ʿoo; (2) zen tsʿangˀ

C. 船澳 ˏshün òˀ

Doctor

M. 大夫 tai^{4}-fu; 醫生 i^{1}-shêng

S. (2) i sung; 郎中 laung tsong

C. (2) ˏyí ˏsháng†

Dog

M. 狗 kou^{3}

S. „ ʿkeu

C. „ ʿkaú

The —— barks

M. 狗咬 kou^{3} yao^{3}

S. „ 叫 ʿkeu kyauˀ

C. „ 吠 ʿkaú faiˀ

Dollar

M. 洋錢 yang^{2} chʿien^{2}; 元 yüan^{2}

S. „ „ yang dien

C. (2) ˏyün; 銀錢 ˏngan ˏtsʿín*

Half a ——

M. 半塊錢 pan^{4} kʿuai^{4} chʿien^{2}

S. „ „ „ penˀ kʿweˀ dien

C. 半文 púnˀ ˏman

Donkey

M. 驢 lü^{2}

S. „ 子 li ʿts

C. „ ˏlui

Door

M. 門 mên^{2}

S. „ mung

C. „ ˏmún

Next ——

M. 隔壁 ko^{2} pi^{4} (chieh^{4}-pi^{3}-êrh)

S. „ „ kah pih

C. „ 籬 kákˏ ˏléi

Open the door

M. 開門 k'ai[1] mên[2]
S. „ „ k'e mung
C. „ „ ˌhoi ˍmún

Shut the ——

M. 關門 kuan[1] mên[2]
S. „ „ kwan mung
C. „ „ ˌkwán ˍmún

Doorway

M. 門口兒 mên[2] k'ou[3] 'rh
S. „ „ mung ˥k'eu
C. „ „ ˍmún ˥haú

Double

M. 雙 shuang[1]; 兩倍 liang[3] pei[4]
S. (1) saung; (2) ˥liang be˩
C. (1) ˌshöng; (2) ˥löng ˥p'úi

—— as much

M. 多兩倍 to[1] liang[3] pei[4]
S. „ „ „ too ˥liang be˩
C. „ „ „ ˌto ˥löng ˥p'úi

—— (vb).

M. 加一倍 chia[1] i pei[4]
S. „ „ „ ka ih be˩
C. „ „ „ ˌká yat˩ ˥p'úi

Doubt

M. 疑惑 i[2]-huo
S. „ „ nyi ˥ok
C. „ „ ˍyí wák˩; 思疑 ˌsz ˍyí

Down

M. 下 hsia[4]
S. „ ˥'au
C. „ há[2]

Come ——

M. 下來罷 hsia[4] lai[2] pa[4]
S. „ „ ˥'au le
C. 落嘹 lok˩ ˍlai

To put ——

M. 擱下 ko[1] hsia
S. 放下 faung˩ ˥'au
C. „ 落 fong˩ lok˩; 擠落 ˌchai lok˩

Drag

M. 拉 la[1]; 拖 t'o[1]
S. „ 'la; „ t'oo
C. „ ˌlái; „ ˌt'o; 扯 ˥ch'e

To —— a boat ashore

M. 拉船上岸 la[1] ch'uan[2] shang[4] an[4]
S. „ „ „ „ 'la zen 'zaung ngoen˩
C. „ „ „ „ ˌlái ˍshün ˥shöng ngon[2]

Dragon

M. 龍 lung[2]
S. „ long
C. „ ˍlung

Draw (sketch)

M. 畫 hua[4]
S. „ wo˩
C. „ wak˩; 寫 ˥sé

To draw a cart

M. 拉車 la¹ ch'ê¹

S. „ „ 子 la ts'o ʿts

C. „ „ ˌlái ˌch'e

Drawer

M. 抽屜 ch'ou¹ t'i⁴

S. „ „ ts'eu t'i

C. 櫃桶 kwai² ʿt'ung

Dreadful

M. 可畏的 k'o³ wei⁴ ti; 利害 li⁴-hai

S. 可怕 ʿk'au p'oˀ

C. (2) léi² hoi²

Dress (vb.)

M. 打扮 ta³-pan; 穿衣裳 ch'uan¹ i¹-shang

S. (1) ʿtang pan; (2) ts'en i zaung

C. 着衣裳 chök₀ ˌyí ˌshöng

—— (sb.)

M. 衣服 i¹-fu; 衣裳 i¹-shang

S. (2) i zaung

C. (1) ˌyí fuk₂; (2) ˌyí ˌshöng

Drill

M. 操練 ts'ao¹ lien⁴

S. „ „ ts'au lienˀ

C. „ „ ˌts'ò lín²

To —— soldiers

M. 操兵 ts'ao¹ ping¹; 練兵 lien⁴ ping¹

S. (1) ts'au ping; (2) lienˀ ping

C. (1) ˌts'ò ˌping; (2) lín² ˌping

—— **ground**

M. 教場 chiao¹ ch'ang³

S. „ „ kyauˀ dzang

C. 較 „ káúˀ ˌch'öng*

Drink

M. 喝 ho¹

S. „ hah; 吃 chuh

C. 飲 ʿyam

What will you ——?

M. 你喝甚麼 ni³ ho¹ shê(n)²-mo

S. 儂要喝啥 nongˀ iauˀ hah saˀ

C. 你飲乜野呢 ʿnéi ʿyam mat₂ ʿye ˌni

Drive

M. 趕 kan³

S. „ ʿkoen

C. „ ʿkon

To —— a carriage

M. 趕車 kan³ ch'ê¹

S. „ „ 子 ʿkoen ts'o ʿts

C. 御 „ yü² ˌkui

To —— out

M. 攆出 nien³-ch'u¹

S. 趕 „ 去 ʿkoen ts'eh chiˀ

C. „ „ ʿkon ch'ut₂

Driver

M. 車夫 ch'ê¹ fu; 趕車的 kan³ ch'ê¹ ti
S. (1) ts'o foo
C. (1) ˌch'e ˌfú

Drown

M. 淹死 yen¹ ssŭ
S. 沉殺 dzung sah
C. „ 死 ˌch'am ˈsz; 浸死 tsam⁾ ˈsz

Drugs

M. 藥材 yao⁴-ts'ai
S. „ „ yak dze
C. „ „ yok₂ ˌts'oi

Drum

M. 鼓 ku³
S. „ ˈkoo
C. „ ˈkwú

To beat a ——

M. 打鼓 ta³ ku³
S. 敲 „ k'au ˈkoo
C. 打 „ ˈtá ˈkwú

Drunk

M. 醉了 tsui⁴ lo
S. „ tsoe⁾
C. „ tsui⁾

To get ——

M. 喝醉 ho¹ tsui⁴
S. 吃醉 chuh tsoe⁾
C. 飲醉 ˈyam tsui⁾

Dry

M. 乾 kan¹
S. „ koen
C. „ ˌkon

To —— by the fire

M. 烘乾 hung¹ kan¹
S. „ „ hong koen
C. 焙 „ púi² ˌkon

To —— in the sun

M. 晒乾 shai⁴ kan¹
S. „ „ so⁾ koen
C. „ „ shái⁾ ˌkon

Duck

M. 鴨子 ya¹-tzŭ
S. „ ah
C. „ áp₀

Wild ——

M. 野鴨子 yeh³ ya¹-tzŭ
S. „ „ ˈya ah
C. 水 „ ˈshui áp₀

Dung

M. 糞 fên⁴; 屎 shih³
S. „ fung⁾; „ oo⁾
C. „ fan⁾; „ ˈshí

Dust

M. 土 t'u³; 塵土 ch'ên² t'u³
S. 灰塵 hwe dzung
C. 烟 „ ˌyín ˌch'an; 塵埃 ˌch'an ˌoi

Duty

M. 本分 pên³ fên
S. „ „ ᶜpung vungˀ
C. „ „ ᶜpún fan²

Customs ——

M. 稅 shui⁴; 稅餉 shui hsiang³
S. (1) soeˀ; (2) soeˀ hyangˀ
C. (1) shuiˀ; (2) shuiˀ ᶜhöng

Dynasty

M. 朝 chʻao²
S. „ 代 dzau deˀ
C. „ ᵹchʻíú

The Chʻing or Manchu ——

M. 清朝 chʻing¹ chʻao²
S. „ „ tsʻing dzau
C. „ „ ᶜtsʻing ᵹchʻíú

Dysentery

M. 痢疾病 li⁴-chi ping⁴
S. „ „ liˀ dzih
C. „ 症 léi² chingˀ

Each

M. 每 mei³; 各 ko⁴
S. „ ᶜme; „ kauh
C. „ ᵹmui; „ kokₒ

Let —— speak for himself

M. 各人自說 ko⁴ jên² tzŭ⁴ shuo¹
S. „ „ „ 家說 kauh nyung zˀ ka soeh
C. 各人自說 kokₒ ᵹyan tsz² shütₒ

Ear

M. 耳朵 êrh³-to
S. „ „ ᶜnyi ᶜtoo
C. „ ᵹyí

Early

M. 早 tsao³
S. „ ᶜtsau
C. „ ᶜtsò

Earth (globe)

M. 地球 ti⁴ chʻiu²
S. „ „ diˀ jeu
C. „ „ téi² ᵹkʻaú

—— (soil)

M. 土 tʻu³; 土地 tʻu³ ti⁴
S. 爛泥 lanˀ nyi; 地土 diˀ ᶜtʻoo
C. (1) ᶜtʻò; 埌土 ᵹnai ᶜtʻò

East

M. 東 tung¹
S. „ tong
C. „ ᶜtung

Easy

M. 容易 jung²-i
S. „ „ yong yiˀ
C. „ „ ᵹyung yí²

To make the mind ——

M. 放心 fang⁴ hsin¹
S. „ „ faungˀ sing
C. „ „ fongˀ ᵹsam

Eat

M. 吃 ch'ih[1]
S. „ chuh
C. „ yák$_o$; 食 shik$_2$

Not enough to ——

M. 不 彀 吃 的 pu[4] kou[4] ch'ih[1] ti
S. 勿 „ 事 吃 'veh keu^2 z^2 chuh
C. 唔 够 食 $_c$m káú^2 shik$_2$

Not good to ——

M. 不 好 吃 pu[4] hao[3] ch'ih[1]
S. 勿 „ „ 'veh ^{h}hau chuh
C. 唔 „ 食 $_c$m ^{h}hò shik$_2$

Unable to ——

M. 吃 不 了 ch'ih[1] pu liao[3]
S. „ 勿 落 chuh 'veh lauh
C. 唔 會 食 $_c$m ^{s}wui shik$_2$

Uneatable

M. 吃 不 得 ch'ih[1] pu tê
S. „ 勿 „ chuh 'veh tuh
C. 不 可 食 pat$_7$ ^{h}ho shik$_2$

Ebb-tide

M. 落 潮 lo[4] ch'ao[2]
S. „ „ lauh dzau; 退 潮 t'e^2 dzau
C. 水 乾 ^{s}shui $_c$kon

The tide is ebbing

M. 海 潮 退 了 hai[3] ch'ao[2] t'ui[4] lo
S. „ „ „ „ ^{h}he dzau t'e^2 liau
C. 水 乾 ^{s}shui $_c$kon

Edge

M. 邊 pien[1]; 楞 兒 lêng[2]-'rh
S. „ pien
C. „ $_c$pín

The —— of a knife or sword

M. 刀 刃 兒 tao[1] jê(n)[4] 'rh
S. „ 口 tau ^{h}k'eu
C. „ „ $_c$tò ^{h}haú

Education

M. 教 育 chiao[4] yü
S. „ „ kyau^2 yok
C. „ „ káú^2 yuk$_2$

Effect (sb.)

M. 効 驗 hsiao[4] yen[4]
S. „ „ yau^2 nyien^2
C. „ „ háú^2 yím^2

Effort

M. 勉 强 mien[3] ch'iang[2]; 出 力 ch'u[1] li[4]
S. (1) 'mien jang
C. 費 力 fai^2 lik$_2$

To make an ——

M. 勉 力 mien[3] li[4]
S. „ „ 'mien lih; 出 力 ts'eh lih
C. „ „ ^{m}ín lik$_2$; 出 力 ch'ut$_7$ lik$_2$

Effort, united

M. 協力 hsieh² li⁴
S. „ „ yah lih
C. „ „ híp₂ lik₂; 合力 hop₂ lik₂

Egg

M. 鷄蛋 chi¹ tan⁴; 鷄子兒 chi¹ tzŭ³-'rh
S. 蛋 dan⁾; (1) kyi dan⁾
C. „ tán²*; (1) ˏkai tán²*

Eight

M. 八 pa¹
S. „ pah
C. „ pát₀

Either

M. 或 huo⁴
S. „ 是 ˋok ˋz
C. „ wák₂

—— **large or small**

M. 或大或小 huo⁴ ta⁴ huo⁴ hsiao³
S. „ „ „ „ ˋok doo⁾ ˋok ˋsiau
C. „ „ „ 細 wák₂ tái² wák₂ sai⁾

Elbow

M. 肱膊肘 ko¹-pei chou³
S. 臂撐子 pi⁾ ts'ang ˋts
C. 手肼 ˋshaú ˏcháng

Electricity

M. 電氣 tien⁴ ch'i⁴
S. „ „ dien⁾ chi⁾
C. „ „ tín² héi⁾

Embankment

M. 堤 ti¹; 河堤 ho² ti¹
S. „ di; „ 塘 ˋoo daung
C. 基 ˏkéi; 河基 ˏho ˏkéi; 基圍 ˏkéi ˏwai

Emperor

M. 皇上 huang²-shang
S. „ „ waung zang⁾; 皇帝 waung ti⁾
C. „ „ ˏwong tai⁾

Empire

M. 天下 t'ien¹-hsia; 國 kuo²
S. (1) t'ien ˋ'au; (2) kok
C. (1) ˏtín há²; (2) kwok₀

Employ

M. 用 yung⁴; 使 shih³
S. „ yong⁾
C. „ yung²; „ ˋshai

Employer

M. 東家 tung¹-chia; 主人 chu³-jên
S. „ „ tong ka; (2) ˋtsu nyung
C. „ „ ˏtung ˏká; (2) ˋchü ˏyan; 事頭 sz² ˏt'aú*

Employment

M. 事業 shih⁴ yeh⁴
S. „ 體 z' ᶜt'i
C. „ 業 sz² yíp₂

Constant ——

M. 長工 ch'ang² kung¹
S. „ „ dzang kong
C. „ „ ᶜch'öng ₀kung

Empty

M. 空 k'ung¹
S. „ k'ong
C. „ ᶜhung. [This word being unlucky, 吉 kat₅ is often used instead.]

Encamp

M. 下營 hsia⁴ ying²; 安營 an¹ ying²
S. 紮 „ tsah yung
C. (1) há² ᶜying; 劄營 cháp₀ ᶜying

Encampment

M. 營盤 ying²-p'an
S. „ „ yung ben
C. „ „ ᶜying ᶜp'ún

End

M. 終 chung¹; 末末了 mo⁴ mo⁴ liao³
S. (1) tsong; 末 meh
C. (1) ᶜchung; 收尾 ᶜshaú ᶜméi (*or* ᶣméi)

From beginning to end

M. 從頭至尾 ts'ung² t'ou² chih⁴ wei³
S. „ „ „ „ dzong deu ts' vi'
C. „ „ „ „ ᶜts'ung ᶜt'aú chí' ᶣméi

The —— of the year

M. 年底 nien² ti³
S. „ „ nyien ᶜti
C. „ 尾 ᶜnín ᶣméi

Endure

M. 忍耐 jên³ nai⁴
S. „ „ ᶜnyung ne'
C. „ „ ᶜyan noi²

Unable to ——

M. 忍不住 jên³ pu chu⁴
S. 熬勿過去 ngau' 'veh ᶜkoo chi'
C. 忍不住 ᶜyan pat₅ chü²

Enemy

M. 仇敵 ch'ou² ti²; 敵人 ti² jên²
S. 對敵 te' dih; (1) jeu dih
C. (1) ᶜch'aú tik₂; (2) tik₂ ᶜyan

The ——'s troops

M. 敵兵 ti² ping¹
S. „ „ dih ping
C. „ „ tik₂ ᶜping; 敵軍 tik₂ ᶜkwan

Engage

To —— a teacher

M. 請先生 ch'ing[3] hsien[1]-shêng[1]

S. „ „ „ ᶜts'ing sien sang

C. „ „ „ ᶜts'eng† ˌsín ˌsháng†

To —— a workman

M. 雇工 ku[4] kung[1]

S. „ „ koo' kong

C. „ „ kwú' ˌkung

To —— a person to do

M. 托人做 t'o[1] jên[2] tso[4]

S. „ „ „ t'auh nyung tsoo

C. 請 „ „ ᶜts'eng† ˌyan tsò[2]

Engine

M. 機器 chi[1]-ch'i

S. „ „ kyi chi'

C. „ „ ˌkéi héi'

A fire ——

M. 水龍 shui[3] lung[2]; 救火車 chiu[4] huo[3] ch'ê[1]

S. (1) ᶜs long; (2) kyeu' ᶜhoo ts'o

C. 水車 ᶜshui ˌch'e; (2) kaú' ᶜfo ˌch'e

A railway ——

M. 火車頭 huo[3] ch'ê[1] t'ou[2]

S. „ „ „ ᶜhoo ts'o deu

C. „ „ „ ᶜfo ˌch'e ˌt'aú

England

M. 英國 ying[1] kuo

S. „ „ iung kok

C. „ „ ˌying kwokₒ

English

M. 英國的 ying[1] kuo ti

S. „ „ 个 iung kok kuh

C. „ „ 嘅 ˌying kwokₒ ke'

Englishman

M. 英國人 ying[1] kuo jên[2]

S. „ „ „ iung kok nyung

C. „ „ „ ˌying kwokₒ ˌyan

Enjoy

M. 享 hsiang[3]

S. „ hyang; 享受 hyang' ᶜzeu

C. „ ᶜhöng

Enough

M. 彀 kou[4]

S. „ keu'

C. 够 kaú'

Is it ——?

M. 彀不彀 kou[4] pu kou[4]

S. „ 勿 „ keu' 'veh keu'

C. 够唔够呢 kaú' ˌm kaú' ˌni

Enter

M. 進 chin[4]; 入 ju[4]

S. „ tsing'

C. 入 yapₓ; 進入 tsun' yapₓ

Entrance

M. 口 k'ou³; 門 mên²
S. „ ˈk'eu; „ mung
C. „ ˈhaú; „ ˌmún

—— **to a canal lock**

M. 閘口 cha² k'ou³
S. „ „ zah ˈk'eu
C. 水閘口 ˈshui cháp˩ ˈhaú

Envelope (of a letter)

M. 信封 hsin⁴ fêng¹
S. „ „ sing˃ fong
C. „ „ sun˃ ˌfung

Epidemic

M. 瘟疫 wên¹ i⁴; 瘟災 wên¹ tsai¹
S. „ „ 'wung yok
C. 時症 ˌshí ˌching

Equal

—— **in size**

M. 一般大 i¹ pan¹ ta⁴
S. „ 樣 „ ih yang˃ doo˃
C. 同一樣大細 ˌt'ung yat˩ yöng² tái² sai˃

—— **in age**

M. 同歲的 t'ung² sui⁴ ti
S. „ 年个 dong nyien kuh
C. „ „ ˌt'ung ˌnín

—— **in rank**

M. 同等的 t'ung² têng³ ti
S. „ „ 个 dong ˈtung kuh
C. „ „ ˌt'ung ˈtang

in equal parts

M. 均分 chün¹ fên¹
S. „ „ kyuin fung
C. „ „ ˌkwan fan²; 平分 ˌp'ing fan²

Equip

M. 備辦 pei⁴ pan⁴
S. „ „ be˃ ban˃
C. „ „ péi² pán²

Error

M. 錯 ts'o⁴
S. „ ts'o
C. „ ts'o˃

An —— in reckoning

M. 算錯了 suan⁴ ts'o⁴ lo
S. „ „ „ soen˃ ts'o liau
C. 計 „ kai˃ ts'o˃

Escape

M. 逃跑 t'ao² p'ao³
S. „ 走 dau ˈtseu; 逃脫 dau t'eh
C. 逃避 ˌt'ò péi²; 脫離 t'üt˩ ˌléi

Unable to ——

M. 不能彀脫身 pu⁴ neng²-kou⁴ t'o¹ shên¹
S. 勿能彀脫身 'veh nung keu˃ t'eh sung
C. 唔走得用 ˌm ˈtsaú tak˩ lat˩

To escape from danger

M. 逃險 t'ao² hsien³
S. 避害 bi⁾-'e⁾
C. 逃險 ˌt'ò ʰhím

To —— from prison

M. 逃監 t'ao² chien¹
S. „ „ dau kan
C. „ „ ˌt'ò ˌkám

Escort (sb.)

M. 護軍 hu⁴ chün¹; 衛兵 wei² ping¹
S. 護兵 'oo⁾ ping
C. „ 送之兵 wú² sung⁾ ˌchí ˌping

—— (vb.)

M. 解送 chieh³ sung⁴
S. „ „ ka⁾ song⁾
C. 護 „ wú² sung⁾; 押送 áp˳ sung⁾

To —— a guest

M. 送客 sung⁴ k'o⁴
S. „ „ song⁾ k'ak
C. „ „ sung⁾ hák˳

Establish

M. 立 li⁴; 設立 shê⁴ li⁴
S. „ lih; „ „ seh lih
C. „ láp₂; 建立 kín⁾ láp₂

Europe

M. 歐羅巴 ou¹-lo-pa¹; 歐州 ou¹-chou¹
S. (1) eu loo po
C. (1) ˌaú ˌlò ˌpa; (2) ˌaú ˌchaú

European

M. 歐州人 ou¹-chou¹ jên²
S. (1) eu tseu nyung
C. (1) ˌaú ˌchaú ˌyan

Evening

M. 晚上 wan³-shang
S. 黃昏 waung hwung
C. 挨晚 ˌai ˢmán

Ever

M. 常時 ch'ang² shih²
S. „ 庄 dzang tsaung
C. „ 時 ˌshöng ˌshí

For ——

M. 永遠 yung³-yüan³
S. „ „ 'iong 'yoen
C. „ „ ˢwing ˢyün

Every

M. 各 ko⁴; 每 mei³
S. „ kauh; „ ᶜme
C „ kok˳; „ ˢmui

—— **day**

M. 每天 mei³ t'ien¹
S. „ 日 ᶜme nyih
C. „ „ ˢmui yat₂

Every sort

M. 各樣 ko⁴ yang⁴
S. „ „ kauh yang˃
C. „ „ kok˳ yöng²

—— one

M. 人人兒 jên² jê(n)² ʼrh
S. 各 „ kauh nyung
C. 人 „ ˍyan ˍyan

Everything

M. 所有的 so³ yu³ ti
S. „ „ 个物事 ˂soo ʻyeu kuh meh z˃
C. „ „ 嘅 ˂sho ˍyaú ke˃

Everywhere

M. 處處 ch'u⁴ ch'u⁴; 各處 ko⁴ ch'u⁴; 四面 ssŭ⁴ mien⁴
S. (1) ts'u˃ ts'u˃; (2) kauh ts'u˃; (3) s˃ mien
C. (1) ch'ü˃ ch'ü˃

Evil

M. 惡 ê⁴; 不好 pu⁴ hao³
S. „ auh; 勿好 ʼveh ˂hau
C. „ ok˳

Examine

M. 查 ch'a²; 察驗 ch'a² yen⁴
S. „ dzo; 查察 dzo ts'ah
C. „ ˍch'á; (money) 睇 ˂t'ai

Example

M. 樣子 yang⁴-tzŭ; 榜樣 pang³ yang
S. (2) ˂paung yang˃
C. (1) yöng² ˂tsz; (2) ˂pong yöng²

Except

M. 除了 ch'u² lo
S. „ „ dzu liau
C. „ 去 ˍch'ü hui˃; 除非 ˍch'ü ˍféi

—— that

M. 除此以外 ch'u² tz'ŭ³ i³ wai⁴; 除了那個 ch'u² lo na⁴-ko
S. (1) dzu ˂ts' ˂i nga˃
C. (1) ˍch'ü ˂ts'z ˍyí ngoi²

Excuse (vb.)

M. 原 yüan²; 寬恕 k'uan¹ shu; 寬免 k'uan¹ mien³
S. (1) nyoen; 原諒 nyoen liang²; 得罪 tuh ˂dzoe
C. 見諒 kín˃ löng²

To —— oneself

M. 推辭 t'ui¹ tz'ŭ
S. „ „ t'e dz
C. „ „ ˍt'ui ˍts'z

Exercise (sb.) **To take ——**

M. 走動 tsou³ tung⁴; 活動身子 huo² tung shên¹-tzŭ
S. (1) ˂tseu ˂dong; 運動 yuin˃ ˂dong
C. 行動 ˍhang tung²

Expect

M. 盼望 p'an⁴ wang

S. 望 maung⁾; 想望 ᶜsiang maung⁾

C. ,, mong²

Expenses

M. 花費 hua¹-fei; 用費 yung⁴ fei⁴

S. (1) hwo fi⁾; (2) yong⁾ fi⁾

C. 費用 fai⁾ yung²; 使費 ᶜshai fai⁾

Travelling ——

M. 盤費 p'an² fei⁴

S. ,, ,, ben fi⁾; 路費 loo⁾ fi⁾

C. ,, ,, ˌp'un fai⁾; 路費 lò² fai⁾

Explain

M. 講 chiang³

S. ,, ᶜkaung

C. 解 ᶜkái

Explode

M. 炸開 cha⁴ k'ai

S. ,, ,, tso⁾-k'e; 爆開 pau⁾-k'e

C. ,, ,, chá⁾ ˌhoi

Explosion

—— of gunpowder

M. 火藥轟炸 huo³ yao⁴ hung¹ cha⁴

S. ,, ,, ,, ,, ᶜhoo yak hong k'e

C. ,, ,, ,, ,, ᶜfo yök₂ ˌkwang chá⁾

Killed by an explosion

M. 轟死 hung¹ ssŭ³

S. 炸殺 tso⁾ sah

C. 轟死 ˌkwang ᶜsz

Extinguish

M. 滅 mieh⁴

S. ,, mih

C. ,, mit₂; 熄 sik₅

Eye

M. 眼 yen³; 眼睛 yen³-ching

S. (2) ᶜngan tsing

C. (1) ᶜngán; 眼目 ᶜngán muk₂

Before my eyes

M. 在我眼前 tsai⁴ wo³ yen³ ch'ien²

S. ,, ,, ,, ,, ᶜdze ᶜngoo ᶜngan zien

C. ,, ,, ,, ,, tsoi² ᶜngo ᶜngán ˌts'ín

Face

M. 臉 lien³; 面 mien⁴

S. 面孔 mien⁾ k'ong

C. ,, mín²

Before one's ——

M. 當面 tang¹ mien⁴

S. ,, ,, taung mien⁾

C. ,, ,, ˌtong mín²; 面前 mín² ˌts'ín

Face to face

M. 對面 tui^{4} mien^{4}
S. „ „ te^{5} mien^{5}
C. „ „ tui^{5} mín^{2}

To —— south

M. 向南 hsiang^{4} nan^{2}
S. 朝 „ tsau nen
C. 向 „ höng^{5} ˌnám

Fact

M. 事 shih^{4}; 實事 shih^{2} shih^{4}
S. (2) zeh z^{5}; 實情 zeh dzing^{5}
C. (1) sz^{2}; (2) shat$_{2}$ sz^{2}

In ——

M. 其實 ch'i^{1} shih^{2}; 實在 shih^{2}-tsai^{4}; 原來 yüan^{2}-lai^{2}
S. (1) ji zeh; (2) zeh ʿdze; (3) nyoen le
C. (2) shat$_{2}$ tsoi^{2}

Factory

M. 行 hang^{2}; 廠 ch'ang^{3}; 局 chü^{2}
S. (1) 'aung; (2) dzang; (3) jok
C. (1) ˌhong*; (2) ʿch'ong; (3) kuk$_{2}$

A cloth ——

M. 織布廠 chih^{1} pu^{4} ch'ang^{3}
S. „ „ „ tsuh poo^{5} dzang
C. „ „ „ tsik$_{5}$ pò^{5} ʿch'ong

A gunpowder factory

M. 火藥局 huo^{3} yao^{4} chü
S. „ „ „ ʿhoo yak jok
C. „ „ „ ʿfo yök$_{2}$ kuk$_{2}$

Fail

M. 失 shih^{1}; 不成 pu^{4} ch'êng^{2}
S. (1) seh; 勿成功 'veh dzung kong; 欠缺 chien^{5} choeh
C. (1) shat$_{5}$; (2) pat$_{5}$ ˌshing

To —— in one's duty

M. 不盡本分 pu^{4} chin^{4} pên^{3} fên
S. 勿 „ „ „ 'veh 'dzing ʿpung vung^{5}
C. 不 „ „ „ pat$_{5}$ tsun^{2} ʿpún fan^{2}; 失本分 shat$_{5}$ ʿpún fan^{2}

Fall

M. 吊下來 tiao^{4} hsia lai^{2}; 落 lo^{4}, lao^{4}; 倒 tao^{3}
S. 跌下來 tih 'au^{5} le; (2) lauh; (3) ʿtau
C. 跌 tít$_{o}$; 跌落 tít$_{o}$ lok$_{2}$; 跌倒 tít$_{o}$ ʿtò

To stumble and ——

M. 跌倒 tieh^{1} tao^{3}
S. „ „ tih ʿtau
C. 失足跌下 shat$_{5}$ tsuk$_{5}$ tít$_{o}$ há^{2}

Rain is falling

M. 下雨 hsia⁴ yü³
S. 落 „ lauh ˈyui
C. „ „ lok₂ ˧yü

The leaves are falling

M. 吊葉子 tiao⁴ yêh⁴-tzŭ
S. 樹葉落哉 zu˒ yih lauh tse
C. 落葉 lok₂ yíp₂

False

M. 假 chia³
S. „ ˈka
C. „ ˈká

Family

M. 家 chia¹
S. „ ka
C. „ ˌká

Famine

M. 飢荒 chi¹ huang¹
S. 荒年 hwaung nyien
C. 飢荒 ˌkéi ˌfong

Famous

M. 有名的 yu³ ming² ti
S. „ „ 聲格 ˈyeu ming sang kuh
C. „ „ ˧yaú ˧ming

Fan

M. 扇子 shan⁴-tzŭ
S. „ „ sen˒ ˈts
C. „ shín˒

Far

M. 遠 yüan³
S. „ ˈyoen
C. „ ˧yün

How ——

M. 有多遠 yu³ to¹ yüan³
S. 幾化 „ ˈkyi hau˒ ˈyoen
C. 有幾 „ ˧yaú ˈkéi ˧yün

Farm

M. 莊子 chuang¹-tzŭ
S. 田莊 dien tsaung
C. „ 庄 ˧tˈín ˌchong

Farmer

M. 莊主 chuang¹ chu³
S. „ „ tsaung ˈtsu; 種田个 tsong˒ dien kuh
C. 農夫 ˧nung ˌfú; 耕田佬 ˌkáng ˧tˈín ˧lò

Fat

M. (sb.) 油 yu²; (adj.) 肥 fei²; (of person) 胖 pˈang⁴
S. (1) yeu; (adj.) 壯 tsaung˒; (3) pˈaung˒
C. (1) ˧yaú; 膏油 ˌkò ˧yaú; (2) ˧féi

Father

M. 父親 fu⁴-chˈin
S. 爺 ya; 父 ˈvoo
C. 父親 fú² ˌtsˈan

Fault

M. 過 kuo⁴; 毛病 mao² ping⁴; 錯兒 ts'o⁴ 'rh

S. (1) koo⁵; (2) mau bing⁵; 過失 koo⁵ seh

C. (1) kwo⁵; 過失 kwo⁵ shat₂

It is your ——

M. 是你的不是 shih⁴ ni³ ti pu² shih⁴

S. 是儂个勿是 'z nong⁵ kuh 'veh 'z

C. 呢啲的係你過 ˌni ˌti hai² ˢnéi kwo⁵

Fear

M. 怕 p'a⁴

S. „ p'o⁵

C. „ p'á⁵; 驚 ˌkeng†

February

M. 二月 êrh⁴ yüeh⁴

S. „ „ nyi⁵ nyoeh

C. 英二月 ˌying yí² yüt₀

Feed (animals)

M. 餵 wei⁴

S. „ iui⁵

C. 喂 wai⁵; 餲 héi⁵

Feel

M. 覺 chüeh²

S. „ 着 kauh dzak

C. „ kok₀

To feel pain

M. 覺疼 chüeh² t'êng²

S. „ 着痛 kauh dzak t'ong⁵

C. 見痛 kín⁵ t'ung⁵

Ferry

M. 擺渡 pai³-tu

S. „ „ ˢpa doo⁵

C. 渡頭 tò² ˌt'aú

Fetch

M. 取 ch'ü³; 取來 ch'ü³ lai²

S. 拿來 nau le; 担來 tan le

C. 掙嚟 ˌning ˌlai

Fever

M. 熱病 jê⁴ ping⁴

S. „ „ nyih bing⁵

C. „ „ yít₂ peng²†

To have ——

M. 發熱 fa¹ jê⁴; 發燒 fa¹ shao¹

S. (1) fah nyih

C. (1) fát₀ yít₂

Few

M. 少 shao³; 不多 pu⁴ to¹

S. „ ˢsau; 勿多 'veh too

C. „ ˢshíú

A —— persons

M. 幾個人 chi³-ko jên²

S. „ 个 „ ˢkyi kuh nyung

C. „ 個 „ ˢkéi ko⁵ ˌyan

A few days

M. 幾天 chi³ t'ien¹
S. „ 日 ᶜkyi nyih
C. „ „ ᶜkéi yat̥

Field

M. 田 t'ien²
S. „ dien
C. „ ̥t'ín

Fight (vb.)

M. 打架 ta³ chia⁴
S. 相打 siang ᶜtang
C. 打架 ᶜtá ká'; 打交 ᶜtá ₒkáú

—— (in battle)

M. 打仗 ta³ chang⁴
S. „ „ ᶜtang tsang'
C. „ „ ᶜtá chöng'

Fill

M. 倒滿 tao⁴ man³; 裝滿 chuang¹ man³
S (1) ᶜtau ᶜmen; (2) tsaung ᶜmen
C. 充滿 ̥ch'ung ̥mún; 斟滿 ̥cham ̥mún

Final

M. 終末 chung¹ mo⁴
S. 末脚 meh kyak
C. 尾底 ̥méi ᶜtai

Find

M. 找 chao³; 尋 hsün²
S. „ tsau; „ zing
C. 搵 ᶜwan

I cannot find

M. 我找不着 wo³ chao³ pu chao²
S. „ 尋勿 „ ᶜngoo zing 'veh dzak
C. „ 唔搵得倒 ̥ngo ̥m ᶜwan tak̥ ᶜtò

Cannot —— out

M. 不能查出 pu⁴ nêng² ch'a² ch'u¹
S. 查勿出 dzo 'veh ts'eh
C. 不能查出 pat̥ ̥nang ̥ch'a ch'ut̥

To —— time

M. 抽空兒 ch'ou¹ k'ung¹-'rh
S. 偷 „ t'eu kong
C. 得閒 tak̥ ̥hán

Fine

M. 細 hsi⁴
S. „ si'
C. 幼細 yaú' sai'

Finger

M. 指頭 chih³-t'ou
S. „ „ tsih deu
C. 手指 ᶜshaú ᶜchí

Finish

M. 做成了 tso⁴ ch'êng² lo; 做完了 tso⁴ wan² lo
S. (1) tsoo' dzung; (2) tsoo' wen
C. (2) tsò² ̥yün; 做起 tsò² ᶜhéi

Fire

M. 火 huo³
S. „ ᶜhoo
C. „ ᶜfo

To set —— to

M. 放火 fang⁴ huo³
S. „ „ faung⁹ ᶜhoo
C. „ „ fong⁹ ᶜfo

To light a ——

M. 點火 tien³ huo³
S. „ „ ᶜtien ᶜhoo
C. 透火 t'aú⁹ (or ˩t'aú) ᶜfo

Firm

M. 堅固 chien¹ ku
S. „ „ kyien ᶜkoo; 牢 lau
C. „ „ ˩kín kwú⁹

The table is not ——

M. 桌子不穩當 cho¹-tzŭ pu⁴ wên³-tang
S. 檯子勿牢 de ᶜts 'veh lau
C. 個張檯唔穩陣 ko⁹ ˩chöng ˩t'oi* ˩m ᶜwan chan²
—— (sb.)

M. 行 hang²
S. „ 'aung
C. „ ˩hong

First

M. 第 — ti⁴ i¹; 頭 — 個 t'ou² i¹ ko⁴
S. (1) di⁹ ih; (2) deu ih kuk
C. (1) tai² yat˩; (2) ˩t'aú yat˩ ko⁹

At first

M. 頭裏 t'ou²-li
S. „ „ deu li
C. 先頭 ˩sín ˩t'aú

The —— of the month

M. 初 — ch'u¹ i¹
S. „ „ ts'oo ih
C. „ „ ˩ch'o yat˩

The —— month

M. 正月 chêng⁴ yüeh⁴
S. „ „ tsung nyoeh
C. „ „ ˩ching yüt˩

The —— time

M. 頭一次 t'ou² i¹ tz'ŭ⁴
S. „ „ 回 deu ih we
C. „ „ 次 ˩t'aú yat˩ ts'z⁹

Do this ——

M. 先做這個 hsien¹ tso⁴ chê⁴-ko
S. „ „ 第个 sien tsoo⁹ di⁹ kuh
C. „ „ 呢啲的 ˩sín tsò² ˩ni ˩tí

Fish

M. 魚 yü²
S. „ ng
C. „ ˩yü*

Salt ——

M. 鹹魚 hsien² yü²
S. „ „ ᶜan ng
C. „ „ ˩hám ˩yü*

To fish

M. 釣魚 tiao^{4} yü^{2}; (net) 打魚 ta^{3} yü^{2}

S. (1) tiau^{3} ng; (net) 扳魚 pan ng

C. (1) tíú^{3} ˍyü*; (net) ˈtá ˍyü*

Five

M. 五 wu^{3}

S. „ ˈng

C. „ ˍng

Flag

M. 旗 ch'i^{2}

S. „ ji

C. „ ˍk'éi

Flat (article)

M. 扁 pien^{3}

S. „ ˈpien

C. „ p'ín^{3}

—— **(land)**

M. 平 p'ing^{2}

S. „ bing

C. „ ˍp'ing

Flea

M. 蚵蚤 ko^{4}-tsao

S. 蚤虱 ˈtsau seh

C. 狗 „ ˈkaú shat$_{2}$

Fleet (sb.)

M. 一班 (*or* 幫) 船 i^{1} pan^{1} (*or* pang^{1}) ch'uan^{2}

S. 一隊船 ih de^{3} zen; 一群船 ih juin zen

C. 一幫船 yat$_{2}$ ˍpong ˍshün; 一起船 yat$_{2}$ ˈhéi ˍshün

Flesh

M. 肉 jou^{4}

S. „ nyok

C. „ yuk$_{2}$

Floor

M. 地板 ti^{4} pan^{3}

S. „ „ di^{3} ˈpan

C. 樓 „ ˍlaú* ˈpán; (ground floor) 地臺 téi^{2} ˍt'oí

Flour

M. 麵 mien^{4}

S. 粉 fung

C. 麵粉 min^{2} ˈfan

Flow (vb.)

M. 流 liu^{2}

S. „ lieu

C. „ ˍlaú

Fly (sb.)

M. 蒼蠅 ts'ang^{1}-ying

S. „ „ ts'aung iung

C. 烏 „ ˍwú ˬying

—— (vb.)

M. 飛 fei^{1}

S. „ fi

C. „ ˍféi

Fog

M. 霧 wu⁴; 下霧 hsia⁴ wu⁴

S. „ 露 'oo' loo'; 下霧露 hsia⁴ 'au 'oo' loo'

C. 矇霧 ˌmung mò²

Follow

M. 隨 sui²; 追 chui¹

S. 跟 kung; 跟從 kung dzong; (2) tsoe

C. „ 從 ˌkan ˌts'ung

—— **me**

M. 隨我來 sui² wo³ lai²

S. 跟 „ „ kung 'ngoo le

C. „ „ 去 (*or* 嚟) ˌkan ˊngo hui' (*or* ˌlai)

—— **the river**

M. 順着河 shun⁴ cho ho²

S. „ 則 „ zung' tsuh ˊoo

C. 跟個條河嚟行 ˌkan ko' ˌt'íú ˌho ˌlai ˌháng†

Food

M. 吃食 ch'ih¹ shih; 喫的東西 ch'ih¹ ti tung¹-hsi; 飯 fan⁴

S. (1) chuh zuh; 喫个物事 chuh kuh meh z'; (3) van'

C. 食物 shik₂ mat₂; 伙食 ˊfo shik₂

To cook food

M. 做飯 tso⁴ fan⁴

S. 燒 „ sau van'

C. 煮 „ ˊchü fán²

Foot

M. 脚 chiao³

S. „ kyak

C. „ kök₀

To go on ——

M. 步下走 pu⁴ hsia⁴ tsou³

S. „ 行 boo' 'ang

C. 行路去 ˌháng† lò² hui'

—— **of a hill**

M. 山根兒 shan¹ kê(n)¹-'rh

S. „ 脚 san kyak

C. „ „ ˌshán kök₀

—— **(measure)**

M. 尺 (=14·1 in. English) ch'ih³

S. „ ts'ak

C. „ ch'ek₀†

Footprints

M. 脚印兒 chiao³ yi(n)⁴-'rh

S. „ „ 子 kyak iung' ˊts

C. „ „ kök₀ yan'

For

Buy it —— me

M. 給我買 kei³ wo³ mai³

S. 替 „ „ t'i' ˊngoo ˊma

C. 同 „ „ ˌt'ung ˊngo ˊmái

For instance

M. 比方 pi³-fang
S. „ „ ᶜpi faung
C. „ 如 ᶜpéi ₍yü

There are provisions —— three years

M. 有三年的粮食 yu³ san¹ nien² ti liang²-shih
S. 有三年个粮食 ᶜyeu san nyien kuh liang zuh
C. 有三年之粮食 ᶜyaú ₍sám ₍nín ₍chí ₍lông shik₂

—— what reason

M. 因爲甚麽 yin¹-wei² shê(n)²-mo
S. 爲啥 we' sa'; 爲啥緣故 we' sa' yoen koo'
C. 爲乜緣故 wai² mat, ₍yün kwú'

Forbid

M. 禁止 chin⁴ chih³
S. „ „ kyung ᶜts
C. „ „ kam' ᶜchí

To —— the sale

M. 禁止賣 chin⁴ chih³ mai⁴
S. „ „ „ kyung ᶜts ma'
C. „ „ „ kam' ᶜchí mái²

I —— you to go out

M. 我總不許你出去 wo³ tsung³ pu hsü³ ni³ ch'u¹ ch'ü
S. 我勿許儂出去 ᶜngoo 'veh ᶜhyui nong' ts'eh chi'
C. 我總不許你出去 ᶜngo ᶜtsung pat, ᶜhui ᶜnéi ch'ut, hui'

Ford

M. 淺水 ch'ien³ shui³
S. „ „ ᶜts'ien ᶜs
C. 津 ₍tsun

Is there a ——?

M. 有淺渡麽 yu³ ch'ien³ tu⁴ mo
S. 阿有淺渡 ᶜa ᶜyeu ᶜts'ien doo'
C. 有涉水處冇呀 ᶜyaú shíp₀ ᶜshui ch'ü' ᶜmò á²

Foreign

M. 外 wai⁴; 洋 yang²
S. „ nga'; „ yang
C. „ ngoi²; „ ₍yöng

—— countries

M. 外國 wai⁴ kuo²
S. „ „ nga' kok
C. „ „ ngoi² kwok₀

—— goods

M. 洋貨 yang² huo⁴
S. „ „ yang hoo'
C. „ „ ₍yöng fo'

Forest

M. 樹林子 shu^4 lin^2-tzŭ
S. „ „ zu^3 ling
C. „ „ shü^2 ˌlam

Forget

M. 忘 wang^4
S. „ maung^3; 忘記 maung^3 kyi^3
C. 唔記得 ˌm kéi^3 tak$_5$; 忘記 ˌmong kéi^3

I will not ——

M. 我忘不了 wo^3 wang^4 pu liao^3
S. „ 勿忘記 ˁngoo ʼveh maung^3 kyi^3
C. „ 是必 „ 得 ˁngo shí^2 pít$_5$ kéi^3 tak$_5$

Forgive

M. 饒 jao^2; 寬免 k'uan^1 mien^3
S. (1) nyau; 饒恕 nyau ˁso
C. 赦免 she^3 ˁmín

—— him

M. 饒恕他 jao^2 shu t'a^1
S. „ „ 伊 nyau ˁso yi
C. 赦佢罪 she^3 ˁk'ui tsui^2

Fork

M. 叉子 ch'a^1-tzŭ
S. „ ts'o
C. „ ˌch'á

A forked road

M. 岔道 ch'a^4 tao^4
S. 叉路 ts'o loo^3
C. 開丫路 ˌhoi ˌá lò^2

Fort

M. 砲臺 p'ao^4 t'ai^2
S. „ „ p'au^3 de
C. „ „ p'áú^3 ˌt'oi

Fortify

M. 築圍 chu^2 wei^2
S. „ „ tsauh we
C. „ „ chuk$_5$ ˌwai

Fortunate

M. 吉 chi^2; 有造化的 yu^3 tsao^4-hua ti
S. „ 利 kyih li^3; 運氣好 yuin^3 chi^3 ˁhau
C. (1) kat$_5$; 好彩 ˁhò ˁts'oi 好命 ˁhò meng^2 †

He is ——

M. 他運氣好 t'a^1 yün^4-ch'i hao^3
S. 伊 „ „ „ yi yuin^3 chi^3 ˁhau
C. 佢好彩 ˁk'ui ˁhò ˁts'oi

Forty

M. 四十 ssŭ^4 shih^2
S. „ „ s^3 seh
C. „ „ sz^3 shap$_2$

Four

M. 四 ssŭ⁴
S. „ s⁾
C. „ sz⁾

France

M. 法國 fa⁴ kuo²
S. „ „ fah kok
C. „ „ fát₀ kwok₀

Free (independent)

M. 自由 tzŭ⁴ yu²; 自主 tzŭ⁴ chu³
S. (1) z⁾ yeu; (2) z⁾ ᶜtsu
C. (1) tsz² ₍yaú; (2) tsz² ᶜchü

French

M. 法國的 fa⁴ kuo² ti
S. „ „ 个 fah kok kuh
C. „ „ 嘅 fát₀ kwok₀ ke⁾

Fresh

M. 新鮮 hsin¹-hsien
S. „ „ sing sien
C. „ „ ₍san ₀sín

—— **water**

M. 甜水 t'ien² shui³
S. „ „ dien ᶜs; 淡水 ᶜdan ᶜs
C. 淡水 ᶜt'ám ᶜshui

Friday

M. 禮拜五 li³ pai wu³
S. „ „ „ ᶜli pa ᶜng
C. „ „ „ ₍lai pai⁾ ₍ng

Friend

M. 朋友 p'êng² yu; 相好的 hsiang¹ hao³ ti
S. (1) bang ᶜyeu; 相好 siang ᶜhau
C. (1) ₍p'ang ᶜyaú

Frighten

M. 嚇呼 hsia⁴-hu¹
S. „ hak
C. „ hák₂

He is frightened and dares not go

M. 他嚇的不敢去 t'a¹ hsia⁴ ti pu⁴ kan³ ch'ü⁴
S. 伊嚇得勿敢去 yi hak tuh 'veh ᶜken chi⁾
C. 佢慌唔敢去 ₍k'ui ₍fong ₍m ᶜkom hui⁾

From

Where do you come ——?

M. 你打那兒來 ni³ ta³ na³ 'rh lai²
S. 儂從那裏來 nong dzong ᶜ"a ᶜli le
C. 你由邊處嚟 ₍néi ₍yaú ₍pín shü⁾ ₍lai

—— **Shanghai to Hankow**

M. 從上海到漢口 ts'ung² shang⁴-hai tao⁴ han⁴-k'ou³
S. 從上海到漢口 dzong ᶜzaung ᶜhe tau⁾ han ᶜk'eu

From Shanghai to Hankow (*continued*)

C. 由上海至漢口 ˏyaú shöng² ˈhoi chi˒ hon˒ ˈhaú

Front

M. 前頭 ch'ien²-t'ou ; 正面 chêng⁴ mien⁴

S. (1) zien deu; (2) tsung˒ mien˒

C. (1) ˏts'ín ˏt'aú; (2) ching˒ mín²

—— door

M. 前門 ch'ien² mên²

S. „ „ zien mung

C. „ „ ˏts'ín mún²

The —— (mil.)

M. 戰線 chan⁴ hsien⁴

S. „ „ tsen˒ sien˒

C. „ „ chín˒ sín˒

Frost

M. 霜 shuang¹ ; 下霜 hsia⁴ shuang¹

S. „ saung

C. „ ˏsöng ; 落霜 lok₂ ˏsöng

Fruit

M. 菓子 kuo³-tzŭ

S. „ „ ˈkoo-ˈts

C. „ ˈkwo

Fuel

M. 柴火 ch'ai²-huo³

S. „ za

C. „ ˏshái (ˏch'ái); 薪 ˏsan

Full

M. 滿 man³

S. „ ˈmen

C. „ ˏmún

Funeral

M. 喪事 sang¹ shih⁴

S. „ „ saung z˒; 出喪 ts'eh saung

C. „ „ ˏsong sz²; 殯葬 pan˒ tsong˒

To attend a ——

M. 送殯 sung⁴ pin⁴

S. „ 喪 song˒ saung

C. „ 殯 sung˒ pan˒; 送葬 sung˒ tsong˒

Funnel

M. 漏斗 lou⁴ tou³

S. „ „ leu˒ ˈteu

C. „ 砵 laú² pút₀

—— of a steamer

M. 烟筒 yen¹ t'ung

S. „ „ ien t'ong

C. „ „ ˏyín ₀t'ung

Furniture

M. 傢伙 chia¹-huo

S. „ „ ka ˈhoo

C. „ 私什物 ˏká ˏsz shap₂ mat₂

Further

M. 更遠 kêng⁴ yüan³

Further (*continued*)

S. 愈 „ yui ˇyoen ; 更加遠 kung˅ ka ˇyoen

C. 更遠 kang˅ ˇyün ; 遠啲 ˇyün ₒti

Gale

M. 大風 ta⁴ fêng¹

S. „ „ doo˅ fong

C. „ „ tái² ˌfung

Gallop

M. 跑 p'áo³

S. „ bau

C. „ ˇp'áú

Garden

M. 園子 yüan²-tzŭ ; 花園 hua¹ yüan²

S. „ yoen ; (2) hwo yoen

C. (2) ˌfá ˌyün*

Gas

M. 煤氣 mei² ch'i⁴

S. „ „ me chi˅

C. „ „ ˌmúi héi˅

Gate

M. 門 mên²

S. „ mung

C. 閘 cháp₀

Gear

M. 器具 ch'i⁴ chü⁴

S. „ „ chi˅ jui˅

C. „ „ héi˅ kui²

Gear (machinery)

M. 機齒輪 po¹ ch'ih³ lun²

S. „ „ „ peh ˇts' lung

C. 機械 ˌkéi hái²

General (sb.)

M. 將軍 chiang⁴ chün¹; 大帥 ta⁴ shuai⁴; 提督 t'i²-tu; 陸軍上將 lu⁴ chün¹ shang⁴ chiang¹

S. (1) tsiang kyuin; (2) doo˅ se˅; (3) di tok; (4) lok kyuin zaung tsiang

C. (1) ˌtsöng ˌkwan; (4) luk₂ ˌkwan ˌshöng ˌtsöng

Major ——

M. 陸軍中將 lu⁴ chün chung¹ chiang¹

S. „ „ „ „ lok kyuin tsong tsiang

C. „ „ „ „ luk₂ ˌkwan ˌchung ˌtsöng

—— **term**

M. 總名 tsung³ ming²

S. „ „ ˇtsong ming

C. „ „ ˇtsung ˌming

Gentry

M. 紳士 shên¹-shih ; 鄉紳 hsiang¹ shên¹

S. (1) sung ˇz; (2) hyang sung

C. (1) ˇshan sz²*; 縉紳 tsun˅ ˌshan; (2) ˌhöng ˌshan

Genuine

M. 眞 chên[1]
S. „ tsung
C. „ ˌchan

Geomancy

M. 風水 fêng[1] shui[3]
S. „ „ fong ˁs
C. „ „ ˌfung ˁshui

Germany

M. 德國 tê[2] kuo[2]
S. „ „ tuh kok
C. „ „ tak˩ kwok˪

Get

M. 得 tê[2]
S. „ 着 tuh dzak
C. „ tak˩

To —— one's wish

M. 得意 tê[2] i[4]
S. „ „ tuh iˀ
C. „ „ tak˩ yiˀ

Girl

M. 女兒 nü[3]-'rh ; 姑娘 ku[1]-niang
S. „ 囝 ˁnyui noen; (2) koo nyang
C. „ 仔 ˁnui ˁtsai ; (2) ˌkwú ˌnöng

Servant ——

M. 丫頭 ya[1]-t'ou
S. „ „ au deu
C. „ „ ˌá ˌt'aú

Give

M. 給 kei[3]; 交 chiao[1]; 送 sung[4]
S. 撥 peh ; (2) kau ; (3) songˀ
C. 俾 ˁpéi ; (2) káú ; (3) sungˀ

—— me that

M. 給我那個 kei[3] wo[3] na[4]-ko
S. 儂撥伊个我 nongˀ peh i kuh ˁngoo
C. 俾㗎個過我 ˁpéi ˁko koˀ kwoˀ ˁngo

—— it to him (as a present)

M. 送他 sung[4] t'a[1]
S. „ 伊 songˀ yi
C. „ 俾佢 sungˀ ˁpéi ˁk'ui

Glad

M. 喜歡 hsi[3] huan
S. „ „ ˁhyi hwen; 快活 k'aˀ weh
C. „ „ ˁhéi ˌfún (*or* ˌfún ˁhéi)

Glass

M. 玻璃 po[1] li
S. „ „ poo li
C. „ „ ˬpo ˬléi

A looking ——

M. 鏡子 ching[4]-tzŭ
S. „ „ kyungˀ ˁts
C. „ kengˀ†; 面鏡 min[2] kengˀ†

A wine glass

M. 酒杯 chiu^{3} pei^{1}
S. „ „ ᶜtsieu pe
C. „ „ ᶜtsaú ₀pui

Go

M. 去 ch'ü^{4}; 上 shang^{4}
S. „ chi^{5}; „ ᶜzaung
C. „ hui^{5}

Don't ——

M. 別去 pieh^{2} ch'ü^{4}
S. 勿要去 'veh iau^{5} chi^{5}
C. 唔好 „ ₍m ᶜhò hui^{5}

Where are you going?

M. 你往那裏去 ni^{3} wang^{3} na^{3}-li ch'ü^{4}
S. 儂到那裏去 nong^{2} tau^{5} ᶜa ᶜli chi^{5}
C. 你去邊(處) ᶜnéi hui^{5} ₀pín (shü^{5}).

Goat

M. 山羊 shan^{1} yang^{2}
S. „ „ san yang
C. „ „ ₍shán yöng^{2}

God

M. 上帝 shang^{4} ti^{4}; 天 t'ien^{1}
S. „ „ ᶜzang ti^{5}; „ t'ien
C. „ „ shöng^{2} tai^{5}

Godown

M. 棧房 chan^{4} fang^{2}
S. „ „ ᶜdzan vaung
C. „ „ chán^{2} ₍fong*

Gold

M. 金 chin^{1}; 金子 chin^{1}-tzŭ
S. „ kyung; „ „ kyung ᶜts
C. „ ₍kam

Made of ——

M. 金子做的 chin^{1}-tzŭ tso^{4} ti
S. „ „ „ 个 kyung ᶜts tsoo^{5} kuh
C. „ 做嘅 ₍kam tsò^{2} ke^{5}

Gong

M. 鑼 lo^{2}
S. „ loo
C. „ ₍lo

Good

M. 好 hao^{3}; 善 shan^{4}
S. „ ᶜhau; „ ᶜzen
C. „ ᶜhò; „ shín^{2}

Is it ——?

M. 好不好 hao^{3} pu hao^{3}
S. „ 勿 „ ᶜhau 'veh ᶜhau
C. „ 唔 „ ᶜho ₍m ᶜhò

—— to eat

M. 好吃的 hao^{3} ch'ih^{1} ti
S. „ „ 个 ᶜhau chuh kuh
C. „ 食 ᶜhò shik$_{2}$

Good for nothing

M. 不中用 pu⁴ chung⁴ yung⁴

S. 勿 „ „ 'veh tsong yong'

C. 冇用 ˌmò yung²; 唔中用 ˌm ˌchung yung²

Goods

M. 貨 huo⁴

S. „ hoo'

C. „ fo'

Goose

M. 鵝 o²

S. „ ngoo

C. „ ˌngo

Govern

M. 管 kuan³; 治理 chih⁴ li³

S. „ ʿkwen; „ „ dz' ʿli

C. „ ʿkwún; „ „ chí² ˩lèi

To —— the country

M. 治國 chih⁴ kuo²

S. „ „ dz' kok

C. „ „ chí² kwokₒ

Government

M. 國政 kuo² chêng⁴

S. „ „ kok tsung'; 政治 tsung' dz'

C. „ „ kwokₒ ching'

Government, the

M. 政府 chêng⁴ fu; 國家 kuo² chia

S. (1) tsung' foo; (2) kok kya

C. (1) ching' ʿfú; (2) kwokₒ ˌká

—— officers

M. 官 kuan¹

S. „ kwen

C. „ ˌkwún

Governor

M. 總督 tsung³-tu; 巡撫 hsün²-fu

S. (1) ʿtsong tok; (2) dzing ʿfoo

C. (1) ʿtsung tukᵥ; (2) ˌts'un ʿfú

Gradually

M. 漸漸 chien⁴ chien⁴

S. „ „ ʿdzien ʿdzien

C. „ „ tsim² tsim²*

Granary

M. 倉 ts'ang¹

S. „ ts'aung

C. „ 房 ˌts'ong ˌfong; 穀倉 kukᵥ ˌts'ong

Grass

M. 草 ts'ao³

S. „ ts'au

C. „ ʿts'ò

Grateful

M. 感激 kan³-chi¹

S. „ „ ʿken kyi

C. „ 恩 ʿkom ˌyan

Grateful for favours

M. 感恩 kan³ ên¹
S. „ „ ᶜken ung
C. „ „ ᶜkom ᶜyan

Grave (sb.)

M. 墳 fên²; 墳墓 fên² mu⁴
S. „ vung
C. „ ᶜfan; „ „ ᶜfan mò²

Great

M. 大 ta⁴
S. „ doo˒
C. „ tái²

Green

M. 緑 lü⁴
S. „ lok
C. „ luk̚₂

Grey

M. 灰色 hui¹ sê⁴
S. „ „ hwe suh
C. „ „ ᶜfui shik̚₂

Grind

M. 磨 mo²
S. „ moo
C. „ ᶜmo

Ground

M. 地 ti⁴
S. „ di˒
C. „ téi²

On the ——

M. 地下 ti⁴ hsia⁴
S. 地上 di˒ laung˒
C. „ 下 téi² há²; 在地下 tsoi² téi² há²

To —— (as a vessel)

M. 擱淺 ko¹ ch'ien³
S. „ „ kauh ᶜts'ien
C. „ „ kok̚₂ ᶜts'ín

Guard (sb.)

M. 護衛的兵 hu⁴ wei⁴ ti ping¹; 衛隊 wei² tui⁴
S. 護衛兵 'oo˒ we˒ ping; (2) we˒ de˒
C. 護衛之兵 wú² wai² ᶜchi ᶜping; (2) wai² tui²

—— (vb.)

M. 守 shou³; 把守 pa³shou³; 護 hu⁴
S. (1) ᶜseu; (3) 'oo˒
C. (1) ᶜshaú; 保守 ᶜpò ᶜshaú; 防護 ᶜfong wú²

Guild (hall)

M. 會館 hui⁴-kuan³
S. „ „ we˒ ᶜkwen
C. „ „ wúi² ᶜkwún

Guilty

M. 有罪 yu³ tsui⁴
S. „ „ ᶜyeu dzoe
C. „ „ ᶜyaú tsui²

Gun (cannon)
M. 炮 p'ao⁴
S. „ p'au³
C. „ p'áú³

—— **(fire-arms)**
M. 鎗 ch'iang¹
S. „ ts'iang
C. „ ₀ts'öng

Butt of a ——
M. 鎗托子 ch'iang¹ t'o¹-tzŭ
S. „ „ ts'iang t'auh
C. „ „ ₀ts'öng t'ok₀

Trigger of a ——
M. 鎗機子 ch'iang¹ chi¹-tzŭ
S. „ „ ts'iang kyi
C. „ „ ₀ts'öng ₍kéi

Barrel of a ——
M. 鎗筒 ch'iang¹ t'ung³
S. „ 管 ts'iang ᶜkwen
C. „ 筒 ₀ts'öng ᶜt'ung ; 鎗身 ₀ts'öng ₍shan

—— **powder**
M. 火藥 huo³ yao⁴
S. „ „ ᶜhoo yak
C. „ „ ᶜfo yök₂

To fire a ——
M. 放鎗 fang⁴ ch'iang¹
S. „ „ faung³ ts'iang
C. „ „ fong³ ₀ts'öng

Gun, to load a
M. 裝鎗 chuang¹ ch'iang¹
S. „ „ tsaung ts'iang
C. „ „ ₍chong ₀ts'öng

Hail (sb.)
M. 雹子 pao²-tzŭ
S. 冰雹 ping bauh
C. 雹 pok₂

—— (vb.)
M. 下雹子 hsia⁴ pao²-tzŭ
S. 落冰雹 lauh ping bauh
C. „ 雹 lok₂ pok₂

Hair (human)
M. 頭髮 t'ou²-fa³
S. „ „ deu fah
C. „ „ ₍t'aú fát₀

—— **(of animals)**
M. 毛 mao²
S. „ mau
C. „ ₍mò

Half
M. 半 pan⁴
S. „ pen³
C. „ pún³

Halt
M. 站住 chan⁴-chu⁴
S. 停拉 ding la³
C. 立定 láp₂ ting²

Ham

M. 火腿 huo³-t'ui³
S. „ „ ᶜhoo ᶜt'e
C. „ „ ᶜfo ᶜt'ui

Hammer

M. 鎚子 ch'ui²-tzŭ
S. 榔頭 laung deu
C. 鎚 ˍts'ui

Hand

M. 手 shou³
S. „ ᶜseu
C. „ ᶜshaú

Lend a ——

M. 幫忙 pang¹ mang²
S. „ „ paung maung
C. 帮助 ˍpong cho²

Handkerchief

M. 手巾 shou³-chin¹
S. „ „ ᶜseu kyung
C. „ „ ᶜshaú ˍkan

Hang

M. 吊 tiao⁴; 掛 kua⁴
S. „ tiau⁾; „ kwo⁾
C. „ tíú⁾; „ kwá⁾

Happen

M. 遇 yü⁴; 逢 fêng²
S. 碰着 bang⁾ dzak; 生 sang
C. (1) yü²; (2) ˍfung

What has happened?

M. 怎麼了 tsê(n)³-mo lo
S. 有啥碰着 ᶜyeu sa⁾ bang dzak
C. 遇着乜事呢 yü² chök₂ mat₂ sz² ˍni

What happened then?

M. 後來怎麼樣 hou⁴-lai² tsê(n)³-mo yang⁴
S. „ „ 那能呢 ᶜeu le na⁾ nung nyi
C. 個陣時遇着乜事呢 ᶜko chan² ˍshí* yü² chök₂ mat₂ sz² ˍni

Harbour

M. 海口 hai³ k'ou³; 港口 chiang³ k'ou³
S. (1) ᶜhe ᶜk'eu; (2) ᶜkaung ᶜk'eu
C. (1) ᶜhoi ᶜhaú; (2) ᶜkong ᶜhaú

—— master

M. 理船廳 li³ ch'uan² t'ing¹
S. „ „ „ ᶜli zen t'ing
C. 船政 „ ˍshün ching⁾ ˍt'eng†

Hard

M. 硬 ying⁴
S. „ ngang⁾
C. „ ngáng²; 實 shat₂

—— (difficult)

M. 難 nan²
S. „ nan
C. „ ˍnán

Hardship

M. 苦 k'u³; 難 nan²
S. „ ᶜk'oo; „ nanˀ
C. „ 情 ᶜfú ₍ts'ing

Hat

M. 帽子 mao⁴-tzŭ
S. „ „ mauˀ ᶜɪs
C. „ mòˀ*

Hate

M. 恨 hên⁴
S. „ 'ungˀ
C. „ hanˀ; 恨怒 hanˀ nòˀ

Have

M. 有 yu³
S. „ ᶜyeu
C. „ ₍yaú

Hay

M. 乾草 kan¹ ts'ao³
S. „ „ koen ᶜts'au
C. „ „ ₍kon ᶜts'ò

He

M. 他 t'a¹
S. 伊 yi
C. 佢 ₍k'ui

Head

M. 頭 t'ou²; 腦袋 nao³-tai⁴
S. „ deu
C. „ ₍t'aú

Head (leader)

M. 領頭人 ling³-t'ou²-jên²
S. „ „ „ ᶜling deu nyung
C. 頭目 ₍t'au muk₂

To be at the —— of

M. 管 kuan³; 領 ling³
S. „ ᶜkwen; „ ᶜling
C. 做頭目 tsòˀ ₍t'aú muk₂

—— ache

M. 腦袋疼 nao³-tai⁴ t'êng²
S. 頭痛 deu t'ongˀ
C. „ 痴 ₍t'aú ts'ek₀†

Healthy

M. 身子好 shên¹-tzŭ hao³; 好精身 hao³ ching¹ shên¹
S. 身體好 sung ᶜt'i ᶜhau; 强壯 ᶜjang tsaungˀ
C. 壯健 chongˀ kínˀ

Heap

M. 堆 tui¹
S. „ te
C. „ ₍tui

Hear

M. 聽見 t'ing¹-chien
S. „ „ t'ing kyienˀ
C. „ „ ₍t'eng† kínˀ

Hear, unable to

M. 聽不見 t'ing[1] pu chien[4]
S. „ 勿 „ t'ing 'veh kyien[7]
C. 唔聽得見 ˏm ˌt'eng† tak˧ kín[7]

Able to ——

M. 聽得見 t'ing[1] tê chien[4]
S. „ „ „ t'ing tuh kyien[7]
C. „ „ „ ˌt'eng† tak˧ kín[7]

Heart

M. 心 hsin[1]
S. „ sing
C. „ ˌsam

Heat

M. 熱 jê[4]; (weather) 天熱 t'ien[1] jê[4]
S. (1) nyih; (weather) (2) t'ien nyih
C. (1) yít˨; (weather) 熱氣 yít˨ héi[7]

Prickly ——

M. 痱子 fei[4]-tzŭ
S. „ 瘡 be[7] ts'aung
C. 熱痱 yit˨ fai[7]*

Heaven

M. 天 t'ien[1]
S. „ t'ien
C. „ ˌt'ín

Heavy

M. 重 chung[4]; 沉 ch'ên[2]
S. „ ˇdzong
C. „ ˇɛh'ung˩†

Too heavy

M. 太沉 t'ai[4] ch'ên[2]
S. 忒重 t'uh ˇdzong
C. 重過頭 ˇch'ung† kwo[7] ˏt'aú

Heel

M. 脚後跟 chiao[3] hou[4]-kên[1]
S. „ 跟 kyak kung
C. „ 脷 kök˧ ˌcháng

Help

M. 幫助 pang[1] chu[4]
S. „ „ paung dzoo[7]
C. „ „ ˌpong cho[2]

Mutual ——

M. 相幫 hsiang[1] pang[1]
S. „ „ siang paung
C. „ „ ˌsöng ˌpong

It can't be helped

M. 無奈何 wu[2] nai[4] ho[2]; 沒法子 mei[2] fa[2]-tzŭ
S. (2) meh fah ˇts
C. (1) ˇmò noi[2] ˏho

Her

M. 他 t'a[1]
S. 伊 yi
C. 佢 ˇk'ui

Here

M. 這裏 chê⁴-li; 這兒 chê⁴-'rh

S. 此地 ᶜts‘ di²

C. 呢處 ᶜni shü²; 呢笪 ᶜni tát₀; 呢定 ᶜni teng²*

Wait ——

M. 在這兒等 tsai⁴ che⁴ 'rh têng³

S. 等拉 ᶜtung la

C. 喺係呢處等 ᶜhai ᶜni shü² ᶜtang

Hide

M. 藏 ts‘ang²

S. „ 囥 dzaung k‘aung²

C. „ 埋 ᶜts‘ong ᶜmái; 柄埋 peng²† ᶜmái

High

M. 高 kao

S. „ kau

C. „ ᶜkò

Fifty feet ——

M. 高五丈 kao¹ wu³ chang⁴

S. 五丈高 ‘ng dzang kau

C. 高五丈 ᶜkò ᶜng chöng²

Hill

M. 山 shan¹

S. „ san

C. „ ᶜshán

The top of a hill

M. 山頂 shan¹ ting³

S. „ „ san ᶜting

C. „ „ ᶜshán ᶜteng†

Him

M. 他 t‘a¹

S. 伊 yi

C. 佢 ᶢk‘ui

Hinder

M. 攔阻 lan²-tsu³; 掣肘 ch‘ê⁴ chou³

S. 阻擋 ᶜtsoo taung²; 攔住 lan dzu²

C. (1) ᶢlán ᶜcho; 阻住 ᶜcho chü²

Hire (vb.)

M. 雇 ku⁴

S. „ ᶜkoo

C. „ kwú²

His

M. 他的 t‘a¹ ti

S. 伊个 yi kuh

C. 佢嘅 ᶢk‘ui ke²; 佢啲的 ᶢk‘ui ₀ti

Hit

M. 打 ta³

S. „ ᶜtang

C. „ ᶜtá

To hit the mark

M. 打中了 ta^{3} chung^{4} lo
S. „ „ ʿtang tsongˀ
C. „ „ ʿtá chung

Hither

M. 到這兒 tao^{4} chê^{4}-'rh
S. „ 此地 tauˀ ʿtsʻ diˀ
C. „ 呢處 tòˀ ˏni shüˀ

Hold

M. 拏 na^{2}
S. 捻 nyah
C. 揸 ˏchá

To —— in the hand

M. 手裏拏着 shou^{3} li na^{2} cho
S. 捻在手裏 nyah ʿdze ʿseu ʿli
C. 揸手 ˏchá ʿshaú

To —— in the arms

M. 抱着 pao^{4} cho
S. „ ʿbau
C. „ ˧pʻò

To —— fast

M. 持住 chʻih^{2} chu^{4}; 拏住 na^{2} chù^{4}
S. 捻牢 nyah lau
C. 揸緊 ˏchá ʿkan

How much does it hold?

M. 裝多少 chuang^{1} to^{1}-shao^{3}
S. „ 幾化 tsaung ʿkyi hauˀ
C. „ „ 多呢 ˏchong ʿkéí ₒto ˏni

The —— (of a vessel)

M. 船艙 chʻuan^{2} tsʻang^{1}
S. „ „ zen tsʻaung
C. „ „ ˧shün ₒtsʻong

Hole

M. 窟窿 kʻu^{1}-lung
S. 洞 dongˀ
C. 竇 ˏlung (*or* ₒlung)

Home

M. 家 chia^{1}
S. 屋裡 ok ʿli
C. 家 ˏká; 歸 ˏkwai

He is not at ——

M. 他沒在家 tʻa^{1} mei^{2} tsai^{4} chia^{1}
S. 伊勿 „ 屋裡 yi 'veh ʿdze ok ʿli
C. 佢唔在家 ˧kʻui ˧m tsoi^{2} ˏká

Honest

M. 忠厚 chung^{1} hou^{4}; 老實 lao^{3}-shih^{2}
S. (1) tsong ʿʿeu; (2) ʿlau zeh
C. (1) ˏchung haú^{2}; (2) ˧lò shat$_{2}$

Hook

M. 鉤子 kou[1]-tzŭ
S. „ keu
C „ ˌngaú

Hope

M. 盼望 p'an[4] wang; 指望 chih[3] wang[4]
S. 巴 „ po maung˃; (2)tsih maung˃
C. (1) p'án˃ mong[2]; (2) ˁchí mong[2]

Without ——

M. 沒望兒 mei[2] wang[4]-'rh
S. 無 „ 頭 m maung˃ deu
C. „ 所望 ˌmò ˁsho mong[2]

Horse

M. 馬 ma[3]
S. „ ˁmo
C. ˢmá

A ——

M. 一匹馬 i[1] p'i[3] ma[3]
S. „ „ „ ih p'ih ˁmo
C. „ „ „ yat˩ p'at˩ ˢmá

To saddle a ——

M. 備馬 pei[4] ma[3]
S. 裝 „ tsaung ˁmo
C. 上鞍 ˢshöng ˌon

To ride a ——

M. 騎馬 ch'i[2] ma[3]
S. „ „ ji ˁmo
C. „ „ ˌk'e ˢmá

He has come on horse-back

M. 他是騎馬來的 t'a[1] shih[4] ch'i[2] ma[3] lai[2] ti
S. 伊騎馬來个 yi ji ˁmo le kuh
C. 佢 „ „ 嚟 ˢk'ui ˌk'e ˢmá ˌlai

To shoe a ——

M. 釘掌 ting[1] chang[3]
S. „ 馬脚鐵 ting ˁmo kyak t'ih
C. „ „ 夾 ˌteng˩ ˢmá káp˳

Horseshoe

M. 馬掌 ma[3] chang[3]
S. „ 脚鐵 ˁmo kyak t'ih
C. „ 夾 ˢmá káp˳

Hospital

M. 病院 ping[1] yüan[4]
S. „ „ bing yoen˃; 醫院 i yoen˃
C. 醫館 ˌyí ˁkwún; 醫院 ˌyí yun[2]*

Hostile

M. 敵 ti[2]; 結讐了 chieh[2] ch'ou[2] lo
S. „ dih; „ 寃家 kyih ioen kah
C. „ tik˩; 對敵 tui˃ tik˩

Hot

M. 熱 jê[4]
S. „ nyih
C. „ yít˩

It is beginning to get hot

M. 熱起來了 jê[4] ch'i lai[2] lo

S. „ „ „ „ nyih ᶜchi le liaoᵓ

C. „ „ 嚟 yit₂ ᶜhéi ˌlai

The —— season

M. 熱天 jê[4] t'ien[1]

S. „ „ nyih t'ien

C. 夏 „ há[2] ˌt'ín

Hour

One ——

M. 一點鐘 i tien[3] chung[1]; 一下鐘 i hsia[4] chung[1]

S. (1) ih ᶜtien tsong

C. (1) yat₅ ᶜtím ˌchung

A quarter of an ——

M. 一刻 i[1] k'o[4]

S. „ „ ih k'uh

C. „ 嗜 yat₅ kwat₅

House

M. 房子 fang[2]-tzŭ

S. „ „ vaung ᶜts

C. 屋 uk₅

A thatched ——

M. 草房 ts'ao[3] fang[2]

S. „ 屋 ts'au ok

C. 茅 „ ˌmáú uk₅

A row of houses

M. 一溜房子 i[1] liu[2] fang[2]-tzŭ

S. „ 帶 „ „ ih taᵓ vaung ᶜts

C. „ 行 (*or* 刺) 屋 yat₅ ˌchong (*or* lát₂) uk₅

How?

M. 怎麼 tsê(n)[3]-mo

S. 那能 naᵓ nung

C. 點 ᶜtím; 點樣 ᶜtím yöng[2]*

—— many?

M. 多少 to[1]-shao[3]; 幾 chi[3]

S. 幾化 ᶜkyi hauᵓ

C. 幾多呢 ᶜkéi ₒto ˌni

—— do you say?

M. 怎麼說 tsê(n)[3]-mo shuo[1]

S. 那能話 naᵓ nung wo

C. 你點講呢 ᶜnéi ᶜtím ᶜkong ˌni

Human

M. 人類 jên[2] lei[4]

S. „ „ 个 nyung leᵓ kuh

C. „ „ ˌyan lui[2]

—— nature

M. 人性 jên[2] hsing[4]

S. „ „ nyung singᵓ

C. „ „ ˌyan singᵓ

Hundred

M. 百 pai³, po²
S. „ pak
C. „ pák˳

A —— and fifty

M. 一百五十 i pai³ wu³ shih²
S. „ „ „ „ ih pak ᶜng zeh
C. „ „ „ „ yat˩ pák˳ ᶜng shap˩

A —— and five

M. 一百零五 i pai³ ling² wu³
S. „ „ „ „ ih pak ling ᶜng
C. „ „ „ „ yat˩ pák˳ ˩leng† ᶜng

Hungry

M. 餓了 ê⁴ lo
S. „ 哉 ngoo˩ tse
C. 肚餓 ᶜt'ò ngo²

I am very ——

M. 我餓得很 wo³ ê⁴ tê hên³
S. „ „ 極哉 ᶜngoo ngoo˩ juh tse
C. „ 好肚餓 ᶜngo ᶜhó ᶜt'ò ngo²

Hurry

M. 忙 mang²; 急忙 chi² mang²
S. (1) maung; (2) kyih maung
C. 頻急 ˩p'an kap˩

Don't hurry

M. 別忙 pieh² mang²
S. 勿要忙 'veh iau˩ maung
C. 咪急 ᶜmai kap˩

You are in too much of a ——

M. 你太急了 ni³ t'ai⁴ chi² lo
S. 儂忒急哉 nong˩ t'uh kyih tse
C. 你心急過頭 ᶜnéi ˩sam kap˩ kwo˩* ˩t'aú

—— up

M. 快快 k'uai⁴ k'uai⁴
S. „ 點 k'wa˩ ᶜtien
C. „ 的喇 fái˩ ˳ti ˩lá

Husband

M. 丈夫 chang⁴-fu¹; 男人 nan²-jên²
S. (1) ᶜdzang foo; (2) nen nyung
C. (1) chöng² ˩fú; (2) ˩nám ˩yan*

—— and wife

M. 夫妻 fu¹ ch'i¹
S. „ „ foo ts'i
C. „ „ ˩fú ˩ts'ai

Hut

M. 棚 p'êng²
S. „ bang; 小屋 ᶜsiau ok
C. 寮 ˩liú

I

M. 我 wo³
S. „ ᶜngoo
C. „ ᶜngo

Ice

M. 冰 ping¹
S. „ ping
C. „ ᶜping; 雪 süt₀

The —— is melting

M. 冰化了 ping¹ hua⁴ lo
S. „ 烊哉 ping yang tse
C. „ (*or* 雪) 鎔化 ᶜping (*or* süt₀) ᶜyung fá²

If

M. 若是 jo⁴ shih⁴; 若 jo⁴
S. „ „ zak ᶜz; 如若 zu zak
C. (2) yök₂

But ——

M. 倘若 t'ang³ jo⁴
S. „ „ ᶜt'aung zak
C. „ „ ᶜt'ong yök₂

Ignorant

M. 無知 wu² chih¹
S. „ 識 m suh; 勿曉得 'veh ᶜhyau tuh
C. „ 知 ᶜmò ᶜchí; 冇見識 ᶜmò kin² shik₅

Ill

M. 病了 ping⁴ lo; 有病 yu³ ping⁴
S. 生病 sang bing²; (2) ᶜyeu bing²
C. 病 peng²†

Dangerously ——

M. 病的利害 ping⁴ ti li⁴-hai⁴
S. 重病 ᶜdzong bing²
C. 病甚危 peng² sham² ᶜngai

Are you —— ?

M. 你有病麼 ni yu³ ping⁴ mo
S. 儂 „ „ „ nong² ᶜyeu bing mo
C. 你 „ „ 冇呀 ᶜnéi ᶜyaú peng²† ᶜmò a²

Important

M. 要緊 yao⁴-chin³
S. „ „ iau² ᶜkyung
C. 緊要 ᶜkan yíú²

Impossible

M. 做不得 tso⁴ pu tê
S. „ 勿來个 tsoo² 'veh le kuh
C. 不能 pat₅ ᶜnang; (1) tsò² pat₅ tak₅

Imprison

M. 押在監裏 ya[1] tsai[4] chien[1] li; 囚起來 ch'iu[2] ch'i lai

S. 收監 seu kan; 監起來 kan ᶜchi le

C. 困入監 k'wan˒ yap˩ ˩kám; 收監 ˩shaú ˩kám

In

M. 在 tsai[4]; 裏 li[3]

S. „ ᶜdze; „ ᶜli

C. „ tsoi[2]

Come ——

M. 進來 chin[4] lai

S. „ „ tsing˒ le

C. 入嚟 yap˩ ˩lai

—— the room

M. 在屋裏 tsai[4] wu[1] li

S. „ „ „ ᶜdze ok ᶜli

C. 在房裏 tsoi[2] ˩fong* ˩lui

Inch

M. 寸 ts'un[4]

S. „ ts'ung˒

C. „ ts'ün˒

Include

M. 連 lien[2]; 包在內 pao[1] tsai[4] nei[4]

S. (1) lien; 包括 pau kwah

C. (1) ˩lín; (2) ˩páú tsoi[2] noi[2]; 包括 ˩páú k'üt˩

Including the children

M. 連孩子 lien[2] hai[2]-tzŭ

S. „ 小囝 lien ᶜsiau noen

C. „ 埋啲細蚊仔 ˩lín ˩mái ˩ti sai˒ ˩man ᶜtsai

Increase

M. 加增 chia[1] tsêng[1]; 添 t'ien[1]

S. 增加 tsung ka; (2) t'ien

C. (1) ˩ká ˩tsang

The price increases daily

M. 價錢天天長 chia[4]-ch'ien t'ien[1] t'ien[1] chang[3]

S. 價錢一日大一日 ka˒ dien ih nyih doo˒ ih nyih

C. 日日起價 yat˩ yat˩ ᶜhéi ká˒

Indistinct

M. 不清楚 pu ch'ing[1] ch'u

S. 勿 „ 爽 'veh ts'ing ᶜsaung

C. 唔 „ 楚 ˩m ˩ts'ing ᶜch'o

Indoors

M. 在家裏 tsai[4] chia[1] li; 在裏頭 tsai[4] li[3]-t'ou

S. (1) ᶜdze ka ᶜli; (2) ᶜdze ᶜli deu

C. (1) tsoi[2] ˩ká ᶜlui

Infectious

M. 傳染的 ch'uan[2] jan[3] ti

S. „ „ 个 dzen ᶜnyien kuh

C. „ „ 嘅 ˩ch'ün ᶜyím ke˒

Inform

M. 告訴 kao^{4} su^{4}; 知會 chih^{1} hui^{4}

S. (1) kau^{3} soo^{3}; (2) ts we

C. (1) kò^{3} sò^{3}

Injure

M. 害 hai^{4}; 傷 shang^{1}; 損傷 sun^{3} shang^{1}

S. (1) 'e^{3}; (2) saung; (3) sung^{3} saung

C. (1) hoi^{2}; (2) ˌshöng; (3) ˈsün ˌshöng

Ink

M. 墨水 mo^{4} shui^{3}; (Indian ——) 墨 mo^{4}

S. (1) muh ˈs; (2) muh

C. (1) mak$_{2}$ ˈshui; (2) mak$_{2}$

Inland

M. 內地 nei^{4} ti^{4}

S. „ „ ne^{3} di^{3}

C. „ „ noi^{2} téi^{2}

Inn

M. 店 tien^{4}; 客店 k'o^{4}-tien^{4}

S. „ tien^{3}; „ „ k'ak tien^{3}

C. „ tím^{3}; „ „ hák$_{o}$ tím^{3}

Innocent

M. 沒有罪 mei^{2} yu^{3} tsui^{4}

S. 無罪个 m ˈdzoe kuh

C. „ „ ˌmò tsui^{2}

Insane

M. 瘋了 feng^{1} lo

S. 癡 ts'

C. 瘨 ˌtín

An —— person

M. 瘋子 fêng^{1}-tzŭ

S. 癡 „ ts' ˈts

C. 瘨人 ˌtín ˌyan

Inside

M. 在裏頭 tsai^{4} li^{3}-t'ou

S. 拉 „ 向 la ˈli hyang^{3}

C. 在 „ 頭 tsoi^{2} ˢlui ˌt'aú

Instead

M. 代 tai^{4}; 替 t'i^{4}

S. „ ˈde; „ t'i^{3}

C. „ toi^{2}; „ t'ai^{3}; t'ai^{3}-toi^{2}

Insult (sb.)

M. 罵話 ma^{4} hua^{4}; 欺負 ch'i^{1} fu^{4}

S. (1) mo^{3} wo^{3}

C. (2) ˌhéi fú^{2}

—— (vb).

M. 罵 ma^{4}; 凌辱 ling^{2} ju^{4}

S. „ mo^{3}; 欺 „ chi zok

C. (2) ˌling yuk$_{2}$; 羞辱 ˌsaú yuk$_{2}$

Insure

M. 保 pao^{3}

S. „ ˈpau

C. „ ˈpò; 保險 ˈpò ˈhím

Insure against fire

M. 保火險 pao³ huo³ hsien³
S. „ „ „ ᶜpau ᶜhoo ᶜhyien
C. „ „ „ ᶜpò ᶜfo ᶜhím

Intelligent

M. 明白 ming² pai; 聰明 ts'ung¹ ming
S. (1) ming bak; (2) ts'ong ming
C. (2) ˌts'ung ˌming

Intend, Intention

M. 有意思 yu³ i⁴ ssŭ; 定志 ting⁴ chih⁴
S. (1) ᶜyeu iˀ sˀ; 要 iauˀ; 想 ᶜsiang
C. (1) ᶜyaú yíˀ szˀ; 立意行事 lap₂ yíˀ ˌhang sz²

Interfere

M. 礙 ai⁴; 插嘴 ch'a⁴ tsui³
S. „ ngeˀ; „ „ ts'ah ᶜts
C. (2) ch'áp₀ ᶜtsui; 插手 ch'áp₀ ᶜshaú

To —— with custom

M. 碍着風俗 ai⁴ cho fêng¹ su
S. „ „ „ „ ngeˀ dzak fong dzok
C. „ „ „ „ ngoi² chök₂ ˌfung tsuk₂

Interpret

M. 繙譯 fan¹ i⁴
S. „ „ fan yuh
C. „ „ ˌfán yik₂; (orally) 傳話 ˌch'ün wá²*

Interpreter

M. 繙譯官 fan¹-i⁴ kuan¹; 通事 t'ung¹ shih; 傳話的 ch'uan²-hua⁴ ti
S. (1) fan yuh kwen; (2) t'ong-zˀ
C. (1) ˌfan yik₂ ˌkwún; (2) ˌt'ung szˀ; (3) ˌch'ün wá²*

Interrupt

M. 攔阻 lan² tsu³; 阻住 tsu³ chu⁴
S. 隔斷 kak ᶜdoen; 阻斷 ᶜtsoo ᶜdoen
C. (1) ˌlán ᶜcho; (2) ᶜcho chü²

—— **(in speech)**

M. 插口 ch'à⁴ k'ou³
S. „ „ ts'ah ᶜk'eu
C. „ „ ch'áp₀ ᶜhaú

Into

M. 裏 li³; 在內 tsai⁴ nei⁴
S. „ ᶜli
C. 入 yap₂; 入內 yap₂ noi²

To go —— the inn

M. 進店裏去 chin⁴ tien⁴ li ch'ü⁴
S. 到客店裏去 ᶜtau k'ak tienˀ ᶜli chiˀ
C. 入店 yap₂ timˀ

Invade

M. 侵佔 ch'in¹ chan⁴
S. „ 犯 ts'ing ᶜvan
C. „ ˌts'am; 侵伐 ˌts'am fat₂; 侵入 ˌts'am yap₂

Invent

M. 創造 ch'uang⁴ tsao⁴
S. „ „ tsuang ᶜzau
C. „ 作 ch'ong' tsok₀; 始創 ᶜch'í ch'ong'

To —— a new method

M. 想出新法子來 hsiang³ ch'u¹ hsin¹ fa²-tzŭ lai
S. (1) ᶜsiang ts'eh sing fah ᶜts le
C. 想出新法子嘹 ᶜsöng ch'ut₂ ₍san fát₀ ᶜtsz ₍lai

Invite

M. 請 ch'ing³
S. „ ᶜts'ing
C. „ ᶜtseng †

Invoice

M. 貨單 huo⁴ tan¹
S. „ „ hoo' tan
C. 來貨單 ₍loi fo' ₀tán

Iron

M. 鐵 t'ieh³
S. „ t'ih
C. „ t'ít₀

Island

M. 海島 hai³ tao³
S. „ „ ᶜhe ᶜtau
C. „ „ ᶜhoi ᶜt'ò

It

M. 他 t'a¹; for inanimate things use 這 chê⁴ (this) *or* 那 na⁴ (that)
S. 伊 yi; 第个 di' kuh (this); 伊个 i kuh (that)
C. 佢 ₍k'ui

Jam

M. 糖菓子 t'ang² kuo³-tzŭ
S. „ 醬 daung tsiang'
C. „ 菓 ₍t'ong ᶜkwo

January

M. 正月 chêng⁴ yüeh⁴
S. „ „ tsung nyoeh
C. 英正月 ₍ying ₍ching yüt₂

Japan

M. 日本國 jih⁴ pên³ kuo²
S. „ „ „ zeh ᶜpung kok
C. „ „ „ yat₂ ᶜpún kwok₀

Japanese

M. 日本人 jih⁴ pên³ jên²
S. „ „ „ zeh ᶜpung nyung
C. „ „ „ yat₂ ᶜpún ₍yan

Jetty

M. 馬頭 ma³-t'ou
S. 碼 „ ᶜmo deu
C. 馬 „ ₍má ₍t'aú *

Jew

M. 猶太人 yu² t'ai⁴ jên²
S. ,, ,, ,, yeu t'a' nyung
C. ,, ,, ,, ˏyaú t'ái' ˏyan

Join

M. 聯合 lien²ho²; 接 chieh¹; 相連 hsiang¹ lien²
S. (1) lien keh; (2) kyih; 湊 ts'eu
C. (1) ˏlün hop₂; (2) tsípₒ; (3) ˏsöng ˏlín

—— **(fit together)**

M. 對 tui⁴
S. ,, te'; 湊 ts'eu
C. ,, tui'; 幷合 ping' hop₂

Journey

M. 路程 lu⁴ ch'êng²; 道 tao⁴; (vb.) 走路 tsou³ lu⁴
S. (1) loo' dzung; (2) dau'; (vb.) (3) ˇtseu loo'
C. (1) lò² ˏch'ing; (vb.) ˇtsaú lò²

Jug

M. 壺 hu²; 罐子 kuan⁴-tzŭ
S. ,, 'oo; ,, 頭 kwen' deu
C. 耳瓶 ˇyí ˏp'eng*

July

M. 七月 ch'i¹ yüeh⁴
S. ,, ,, ts'ih nyoeh
C. 英七月 ˏying ts'atₒ yüt₂

June

M. 六月 liu⁴ yüeh⁴
S. ,, ,, lok nyoeh
C. 英六月 ˏying luk₂ yüt₂

Justice

M. 公道 kung¹ tao⁴; 理 li³
S. ,, ,, kong dau'; ,, ˇli
C. ,, ,, ˏkung tò²

Keep

M. 留 liu²; 存 ts'un²; 守 shou³
S. (1) lieu; (2) dzung; (3) ˇseu
C. (1) ˏlaú; (2) ˏts'ün; (3) ˇshaú

To —— guard

M. 看守 k'an⁴ shou³
S. ,, ,, k'oen ˇseu
C. ,, ,, ˏhon ˇshaú

Kettle

M. 水壺 shui³ hu²
S. ,, ,, ˇs 'oo; 吊子 tiau' ˇts
C. 煲 ˏpò

Key

M. 鑰匙 yao⁴ ch'ih (pron. yao⁴ shih)
S. ,, ,, yak dz
C. 鎖 ,, ˇso ˏshí

Kick

M. 踢 t'i¹
S. ,, t'ih
C. ,, t'ekₒ†

Kill

M. 殺 sha[1]

S. „ sah

C. 打死 ˈtá ˈsz; 殺 shát$_{o}$

Kind (adj.)

M. 好 hao[3]; 温和 wên[1]-ho[2]

S. „ 心 ˈhau sing

C. „ „ ˈho ˌsam; 有心 ˈyaú ˌsam

—— (sb.)

M. 類樣 lei[4] yang[4]

S. 種類 ˈtsong le[2]; 樣 yang[2]

C. 樣 yöng[2]; 類 lui[2]

Every ——

M. 樣樣 yang[4] yang[4]; 各樣 ko[4] yang[4]

S. (2) kauh yang[2]

C. (1) yöng[2] yöng[2]; (2) kok$_{o}$ yöng[2]

The same ——

M. 一樣的 i[1] yang[4] ti

S. „ „ 个 ih yang[2] kuh

C. „ „ yat$_{5}$ yöng[2]

King

M. 君主 chün[1] chu[3]; 王 wang[2]

S. (1) kyuin ˈtsu; (2) waung

C. (1) ˌkwan ˈchü; (2) ˌwong

The King of England

M. 大英君主 ta[4] ying[1] chün[1] chu[3]

S. 英國皇帝 iung kok waung ti[2]

C. 大英國大君主 tái[2] ˌying kwok$_{o}$ tái[2] ˌkwan ˈchü

Kingdom

M. 國 kuo[2]

S. „ kok

C. „ kwok$_{o}$

Kitchen

M. 廚房 chˈu[2] fang[2]

S. „ „ dzu vaung; 竈 tsau[2]

C. „ „ ˌchˈü ˌfong*

Knee

M. 波稜蓋兒 po[1] lêng[2] kai[4] ʼrh

S. 膝饅頭 sih men deu

C. „ 頭 sat$_{5}$ ˌtˈaú*

Knife

M. 刀子 tao[1]-tzŭ

S. „ „ tau ˈts

C. „ ˌtò; 刀仔 ˌtò ˈtsai

The handle of a ——

M. 刀子把 tao[1]-tzŭ pa[4]

S. „ 柄 tau ping[2]

C. „ „ ˌtò peng[2]†

Knife, the edge of a

M. 刀刃 tao¹ jên⁴

S. „ 口 tau ᶜk'eu

C. „ „ ˌtò ᶜhaú

Knock

M. 打 ta³

S. „ ᶜtang

C. „ ᶜtá ; 拍 p'ák。

To —— at a door

M. 敲門 ch'iao¹ mên²

S. „ „ k'au mung

C. 扣 „ k'aú² ˌmún

Knot

M. 綑兒 k'u(n)³ 'rh; 疙瘩 ko¹-ta

S. 結子 kyih ᶜts

C. 結頭 kít。ˌt'aú

Know

M. 知道 chih¹ tao

S. 曉得 ᶜhyau tuh; 懂 ᶜtong

C. 知到 ˌchí tò²

How do you ——?

M. 你怎麼知道 ni tsê(n)³-mo chih¹-tao⁴

S. 儂那能曉得 nong² na² nung ᶜhyau tuh

C. 你黠知 ᶜnéi ᶜtím ˌchi

To —— Chinese

M. 會中國話 hui⁴ chung¹ kuo² hua⁴

S. 會中國話 we² tsong kok wo²

C. 識唐話 shik, ˌt'ong wá²*

Do you —— him?

M. 你認識他麼 ni jên⁴ shih⁴ t'a¹ mo

S. 儂阿認得伊 nong² a nyung² tuh yi

C. 你識佢唔識呢 ᶜnéi shik, ᶜk'ui ˌm shik, ˌni

Label

M. 帖子 t'ieh¹-tzŭ; 牌子 p'ai²-tzŭ

S. „ 頭 t'ih deu ; 簽條 ts'ien diau

C. 號 „ 紙 ho² ˌt'aú ᶜchí ; 號標 ˌho ˌpíú; 帖 t'íp。

Labour

M. 工 kung¹; 手工 shou³ kung¹

S. 工夫 kong foo; 生活 sang weh

C. (1) ˌkung ; (2) ᶜshaú ˌkung

Lack

M. 沒有 mei² yu³; 缺 ch'üeh²; 少 shao³; 短 tuan³

S. (2) ch'oeh ; (3) ᶜsau ; 缺少 ch'oeh ᶜsau

C. (3) ᶜshíú; 欠 hím²; 不足 pat, tsuk,

There is a lack of everything

M. 什麼都沒有 shê(n)²-mo tou¹ mei² yu³

S. 樣樣勿彀 yang yang 'veh keu'

C. 樣樣不足 yöng² yöng² pat, tsuk,

Lake

M. 湖 hu²

S. „ woo

C. „ ˏwú

Lamb

M. 羊羔 yang² kao¹

S. „ „ yang kau

C. „ „ ˏyöng ˏkò; 綿羊仔 ˏmín ˏyöng ˈtsai

Lame

M. 瘸 ch'üeh¹

S. 折脚 zeh kyak

C. 跛 „ ˏpai kökₒ

A —— person

M. 瘸子 ch'üeh¹-tzŭ

S. 折脚个 zeh kyak kuh

C. 跛 „ 人 ˏpai kökₒ ˏyan

Lamp

M. 燈 têng¹

S. „ tung

C. „ ₒtang

Lamp, to light a

M. 點燈 tien³ têng¹

S. „ „ ˈtien tung

C. „ „ ˈtím ₒtang

Land (sb.)

M. 地 ti⁴

S. „ di'

C. „ téi²

By ——

M. 旱路 han⁴ lu⁴

S. „ „ ˈoen loo'

C. 打路 ˈtá lò²; 由陸路去 yaú² luk, lò² hui'

Language

M. 話 hua⁴

S. „ wo'

C. 說話 shütₒ wá²

Large

M. 大 ta⁴

S. „ doo', da'

C. „ tái²

Last (adj.)

M. 末 mo⁴; 末尾的 mo⁴ wei³ ti

S. (1) meh; 末末了 meh meh liau

C. 收尾 ˏshau ₒméi (or ˈméi)

—— night

M. 昨晚 tso² wan³

S. „ 夜 dzok ya'

C. „ 晚 tsokₒ ˈmán

Last month

M. 上月 shang⁴ yüeh⁴
S. „ „ ᶜzaung nyoeh
C. 先個月 ᶜsín koˀ yütₔ

—— year

M. 去年 ch'ü⁴ nien²
S. 舊 „ jeuˀ nyien
C. 去 „ huiˀ ᶜnín ; 舊年 kaú² ᶜnín

—— time

M. 上次 shang⁴ tz'ŭ⁴
S. „ 回 ᶜzaung we
C. 先個賬 ᶜsín koˀ chöngˀ

The month before ——

M. 前月 ch'ien² yüeh⁴
S. „ „ zien nyoeh
C. „ 個月 ᶜts'ín koˀ yütₔ

Late

M. 晚 wan³; 遲 ch'ih²
S. 晏 anˀ; „ dz
C. (2) ᶜch'í ; 慢 mán²

He came too ——

M. 他來的太晚了 t'a¹ lai² ti t'ai⁴ wan³ lo
S. 伊來子忒晏 yi le ᶜts t'uh anˀ
C. 佢嚟得遲 ᶜk'ui ᶜlai tak, ᶜch'í

It is late

M. 天晚了 t'ien¹ wan³ lo
S. 晏拉哉 anˀ laˀ tse
C. 夜咯 ye² lokₒ

Laugh

M. 笑 hsiao⁴
S. „ siauˀ
C. „ síúˀ

Laundry

M. 洗衣房 hsi³ i¹ fang²
S. „ „ 作 ᶜsi i tsauh
C. „ „ 店 ᶜsai ᶜyí tímˀ

Law

M. 律例 lü⁴ li; 律法 lü⁴ fa; 王法 wang² fa
S. (1) lih liˀ; 法律 fah lih; 國法 kok fah
C. (1) lutₔ laiˀ; (2) lutₔ fátₒ

To infringe the ——

M. 犯法 fan⁴ fa³
S. „ „ ᶜvan fah
C. „ „ fán² fátₒ

To go to ——

M. 打官司 ta³ kuan¹ ssŭ
S. „ „ „ ᶜtang kwen s
C. „ „ „ ᶜtá ᶜkwún ᶜsz

Military ——

M. 軍法 chün¹ fa³
S. „ „ kyuin fah
C. „ „ ᶜkwan ſátₒ

Lay

M. 放 fang[1]; 擱 ko[1]
S. „ faung˃; „ kauh
C. „ fong˃

To —— down

M. 放下 fang[1] hsia[4]
S. „ „ faung˃ ʿʿau
C. „ „ fong˃ há[2]

Lazy

M. 懶惰 lan[3] to
S. „ „ ʿlan doo˃
C. „ „ ˩lán to[2]

Lead (metal)

M. 鉛 ch'ien[1]
S. „ k'an
C. „ ˩yün

—— pencil

M. 鉛筆 ch'ien[1] pi[3]
S. „ „ k'an pih
C. „ „ ˩yün pat˩

Lead (vb.)

M. 領 ling[3]
S. „ ʿling
C. 帶 tái˃

To —— a horse

M. 拉馬 la[1] ma[3]
S. „ „ ʾla ʿmo
C. „ „ ˧lái ˩má; 引馬 ˩yan ˩má

To lead troops

M. 帶兵 tai[4] ping[1]
S. „ „ ta˃ ping
C. „ „ tái˃ ˧ping

Lean

To —— against (*or* upon)

M. 靠 k'ao[4]
S. „ k'au˃
C. 挨 ˧ái

—— (adj.)

M. 瘦 shou[4]
S. „ seu˃
C. „ shaú˃

Learn

M. 學 hsüeh[2]
S. „ ʿauh
C. „ hok˩

—— (hear)

M. 聽見說 t'ing[1]-chien shuo[1]
S. „ „ „ t'ing kyien˃ seh
C. „ „ ˧t'eng† kín˃

Leather

M. 皮子 p'i[2]-tzŭ; 皮 p'i[2]
S. (2) bi
C. (2) ˩p'éi

Leave (vb.)

M. 離 li[2]; 離開 li[2] k'ai
S. „ li; „ „ li k'e
C. „ ˩léi; „ „ ˩léi ˧hoi

To leave behind

M. 留下 liu[2] hsia
S. „ „ lieu ᶜau
C. „ „ laú[2] há[2]

To —— home

M. 離家 li[2] chia[1]
S. „ „ li kya
C. „ „ ˩léi ˩ká

—— (sb.)

M. 假 chia[4]
S. „ kya'
C. „ ká'

To ask for ——

M. 告假 kao[4] chia[4]
S. „ „ kau' kya'
C. „ „ kò' ká'

To grant ——

M. 准假 chun[3] chia[4]
S. „ „ tsung kya'
C. „ „ ᶜchun ká'

—— **expired**

M. 假滿 chia[4] man[3]
S. „ „ kya' ᶜmen
C. „ „ ká' ˩mún

Left (adj.)

M. 左 tso[3]
S. „ tsi'
C. „ ᶜtso

Leg

M. 腿 t'ui[3]
S. „ ᶜt'e
C. 脚 kök$_o$; 小腿 ᶜsíú ᶜt'ui

To break one's leg

M. 折腿 chê[2] (shê[2]) t'ui[3]
S. „ „ zeh ᶜt'e
C. „ 斷脚 chít$_o$ ˩t'ün kök$_o$

Lemon

M. 香桃 hsiang[1] t'ao[2]
S. 檸檬 ning mung
C. „ „ ˩ning $_o$mung

Lend

M. 借 chieh[4]; 借給 chieh[4] kei[3]
S. „ tsia'
C. „ tse'

Length

M. 長短 ch'ang[2] tuan[3]
S. „ „ dzang ᶜtoen
C. „ ˩ch'öng

What is the —— ?

M. 長多少 ch'ang[2] to[1]-shao[3]
S. 幾化長 ᶜkyi hau' dzang
C. 有幾 „ 呢 ˩yaú ᶜkéi ˩ch'öng ˩ni

Less

M. 少 shao[3]
S. „ sau
C. „ ᶜshíú

—— **than that**

M. 比那個少 pi[3] na[4]-ko shao[3]
S. „ 伊个 „ ᶜpi i kuh sau
C. 少過個個 ᶜshíú kwo' ᶜko ko'

The less the better

M. 越少越好 yüeh⁴ shao³ yüeh⁴ hao³
S. „ „ „ „ yoeh sau yoeh ʿhau
C. „ „ „ „ yüt₂ ʿshíú yüt₂ ʿhò

Let

—— him do it

M. 由他作 yu² tʻa¹ tso⁴
S. 讓伊做 nyang⁷ yi tsoo⁷
C. 由得佢做 ˏyaú tak₅ ʿkʻui tsò²

—— him go

M. 放他 fang⁴ tʻa¹
S. „ 伊去 faung yi chi⁷
C. „ 佢喇 fong⁷ ʿkʻui ˏlá ; 由得佢去 ˏyaú tak₅ ʿkʻui hui⁷

—— me see

M. 給我看 kei³ wo³ kʻan⁴
S. 讓 „ „ 看 nyang⁷ ʻngoo kʻoen⁷ kʻoen⁷
C. 俾 „ 睇 ʿpéi ʿngo ʿtʻai

—— me pass

M. 讓我過去 jang⁴ wo³ kuo⁴ chʻü⁴
S. „ „ „ „ nyang⁷ ʻngoo koo⁷ chi⁷
C. „ „ „ „ yöng² ʿngo kwo⁷ hui⁷

Letter

M. 信 hsin⁴
S. „ sing⁷
C. „ sun⁷

A ——

M. 一封信 i fêng¹ hsin⁴
S. „ „ „ ih fong sing⁷
C. „ „ „ yat₅ ˏfung sun⁷

To send a ——

M. 送信 sung⁴ hsin⁴
S. 寄 „ kyi⁷ sing⁷
C. „ „ kéi⁷ sun⁷

Level

M. 平 pʻing²
S. „ bing
C. „ ˏpʻing

Lichee

M. 荔枝 li⁴ chih¹
S. „ „ ʿli ts
C. „ „ lai² ₀chí

Lie (sb.)

M. 假話 chia³ hua⁴; 謊話 huang³ hua⁴
S. (1) ʿka wo⁷; (2) ʿhwaung wo⁷
C. 大話 tái² wá²; 謊言 ʿfong ˏyín

To tell a ——

M. 撒謊 sa¹ huang³
S. 說 „ soeh ʿhwaung
C. 講大話 ʿkong tái² wá²

Lie (vb.)

M. 躺 t'ang^{3}; 臥 wo^{4}

S. 睏 k'wung^{3}

C. 瞓訓 fan^{3}; (2) ngo^{2}

To —— down

M. 躺下 t'ang^{3} hsia^{4}

S. 睏下去 k'wung ᶜau chi^{3}

C. 瞓訓落 fan^{3} lok$_{2}$; 眠下 ᶜmín há^{2}

Lieutenant

M. 千總 ch'ien^{1} tsung^{3}; 陸軍中尉 lu^{4} chün^{1} chung^{1} wei^{4}

S. (1) ts'ien ᶜtsong; (2) lok kyuin tsong wei

C. 守備 ᶜshaú péi^{2}; (2) luk$_{2}$ ᶜkwan ᶜchung wai^{3}

Second ——

M. 陸軍少尉 lu^{4} chün^{1} shao^{3} wei^{4}

S. „ „ „ „ lok kyuin ᶜsau wei

C. „ „ „ „ luk$_{2}$ ᶜkwan shiú^{3} wai^{3}

Life

M. 性命 hsing^{4} ming^{4}; 命 ming^{4}

S. „ „ sing^{3} ming^{3}

C. „ „ sing^{3} ming^{2}; 生命 ᶜsháng ming^{2}

To risk one's life

M. 拚命 p'in^{1} ming^{4}

S. „ „ p'ing ming^{3}

C. „ „ pín^{2} meng^{2}†

Lift

M. 拏起來 na^{2} ch'i lai

S. „ „ „ nau ᶜchi le; 抬 de; 舉 ᶜkyui

C. 抽起 ᶜch'áú ᶜhéi; 執起 chap$_{5}$ ᶜhéi

To —— a stone

M. 拏起石頭來 na^{2} ch'i shih^{2}-t'ou lai

S. 舉起石頭來 ᶜkyui ᶜchi zak deu le

C. 抽起石頭嚟 ᶜch'áú ᶜhéi shek$_{2}$† ᶜt'au ᶜlai

Light (adj.)

M. (weight) 輕 ch'ing^{1}; (colour) 淡 tan^{4}

S. (1) chung; (2) ᶜdan

C. (1) ᶜheng; (2) tám^{2}

Like

M. 如同 ju^{2} t'ung^{2}; 一樣 i^{1} yang^{4}

S. 像 ᶜziang; (1) zu dong; (2) ih yang

C. 似 ᶜt'sz

Very ——

M. 好像 hao^{3} hsiang^{4}

S. „ „ ᶜhau ᶜziang

C. „ 似 ᶜhò ᶜts'z

Do you like it ?

M. 愛不愛 ai⁴ pu ai⁴

S. 儂好歡喜第个 nong² ʿhau hwen ʿhyi di² kuh

C. 你中意唔中意呢 ˢnéi ˌchung yí ˍm ˌchung yí ˌni

Limb

M. 肢 chih¹

S. „ ts

C. „ ˌchí

Limit

M. 限 hsien⁴; 界 chieh⁴

S. „ ʿan²; „ 限 ka² ʿan²

C. „ hán²; (2) kái²; kái²-hán²

Line

M. 線 hsien⁴

S. „ sien²

C. „ sín²; 行 ˍhong

To draw a ——

M. 畫一道 hua⁴ i tao⁴

S. „ 根線 wo² kung sien²

C. „ 一條線 wák˳ yat˳ ˍtʿíú sín²

Lip

M. 嘴唇 tsui³ chʿun²

S. „ „ ʿts zung

C. 口唇 ʿhaú ˍshun

List

M. 清單 chʿing¹ tan¹; 單子 tan¹-tzŭ

S. (1) tsʿing tan ; (2) tan ʿts

C. 目錄 muk˳ luk˳; 條目 ˍtʿíú muk˳

—— of names

M. 名單 ming² tan¹

S. „ „ ming tan

C. „ „ ˍming ˌtán

Listen

M. 聽 tʿing¹

S. „ tʿing

C. „ ˌtʿeng†

Little

M. (size) 小 hsiao³; (quantity) 少 shao³

S. (1) ʿsiau ; (2) ʿsau

C. (size) 細 sai² ; 小 ʿsiú ; (quantity) 少 shiú²

A ——

M. 一點兒 i tie(n)³ ʾrh

S. „ „ 點 ih ʿtien ʿtien

C. „ 啲的 yat˳ ˳ti

A —— better

M. 好些兒 hao³ hsie(h)¹ ʾrh

S. „ 一點 ʿhau ih ʿtien

C. „ 啲的 ʿhò ˳ti

Wait a little

M. 等一會兒 têng^{3} i hu(i)^{4} 'rh

S. „ „ 歇 ᶜtung ih hyih

C. „ „ 吓 ᶜtang yat$_{5}$ ᶢhá

Live

M. 活 huo^{2}; 生 shêng^{1}; 住 chu^{4}

S. (1) weh; (3) dzu^{3}

C. (1) wút$_{2}$; (2) ₍sháng; (3) chü^{2}

Where do you —— ?

M. 住在那裏 chu^{4} tsai^{4} na^{3}-li

S. 儂住拉那裏 nong dzu^{3} la^{3} ᶜᶜa li

C. 你 „ 邊處呢 ᶢnéi chü^{2} ₍pín shü^{3} ₍ni

He won't ——

M. 他活不了 t'a^{1} huo^{2} pu liao^{3}

S. 活勿長 weh 'veh dzang

C. 佢必死 ᶢk'ui pít$_{5}$ ᶜsz

Lively

M. 快活 k'uai^{4} huo

S. 活潑 weh p'eh

C. „ „ wút$_{2}$ p'út$_{5}$

Load (vb.)

M. 裝 chuang^{1}; 載 tsai^{4}

S. „ tsaung; „ tse^{3}

C. „ ₍chong; „ tsoi^{3}

To load a cart

M. 裝車 chuang^{1} ch'ê^{1}

S. „ „ tsaung ts'o

C. „ „ ₍chong ₍ch'e

To —— a ship

M. 載船 tsai^{4} ch'uan^{2}

S. „ „ tse^{3} zen

C. 裝貨落船 ₍chong fo^{3} lok$_{2}$ ₍shün

To —— a gun

M. 裝鎗 chuang^{1} ch'iang^{1}

S. „ „ tsaung ts'iang

C. 入藥落鎗 yap$_{2}$ yok$_{2}$ lok$_{2}$ $_{5}$ts'öng

—— (sb.)

M. (animal) 馱子 to^{4}-tzŭ; (man) 挑子 t'iao^{1}-tzŭ

S. 擔子 tan^{3} ᶜts

C. „ („) tám^{3} (ᶜtsz)

Local

M. 本地 pên^{3} ti^{4}

S. „ „ ᶜpung di^{3}

C. „ „ ᶜpún téi^{2}

—— **officials**

M. 地方官 ti^{4}-fang kuan^{1}

S. „ „ „ di^{3} faung kwen

C. „ „ „ téi^{2} ₍fong ₍kwún

Lock (sb.)

—— **(of a door)**

M. 鎖 so^{3}

S. „ ᶜsoo

C. „ ᶜso

Lock (of a canal)

M. 閘 cha²

S. „ zah

C. „ tsáp₂

(vb.) —— **the door**

M. 鎖上門 so³ shang⁴ mên²

S. „ 門 ᶜsoo mung

C. „ „ ᶜso ₍mún

Locomotive

M. 火車頭 huo³ ch'ê¹ t'ou²

S. „ „ „ ᶜhoo ts'o deu

C. „ „ „ ᶜfo ₍ch'e ₍t'aú

Log

M. 一根 (or 塊) 木 i kên¹ (*or* k'uai⁴) mu⁴

S. 一根 (*or* 塊) 木頭 ih kung (*or* kw'e⁵) mok deu

C. 木頭 muk₂ ₍t'aú

Long

M. 長 ch'ang²

S. „ dzang

C. „ ₍ch'öng

Twenty feet ——

M. 兩丈長 liang³ chang⁴ ch'ang²

S. „ „ , liang dzang dzang

C. „ „ „ ᶜlöng chöng² ₍ch'öng

It is a very long way

M. 道兒狠遠 tao⁴ 'rh hên³ yüan³

S. 極長个路 juh dzang kuh loo⁵

C. 好遠路 ᶜhò ᶜyün lò²

A —— **time**

M. 工夫大 kung¹ fu¹ ta⁴

S. 一大歇 ih doo⁵ hyih

C. 好耐 ᶜho noi²

Look

M. 看 k'an⁴; 瞧 ch'iao²

S. „ k'oen⁵

C. 睇 ᶜt'ai

—— **for**

M. 找 chao³; 尋 hsün²

S. (2) zing

C. 搵 ᶜwan ; (2) ₍ts'am

—— **after**

M. 管 kuan³; 照管 chao⁴ kuan³

S. „ ᶜkwen; „ „ tsau⁵ ᶜkwen

C. 顧住 kwú⁵ chü²; 打理 ᶜtá ᶜléi

Loose

M. 鬆 sung¹; 解開 chieh³ k'ai¹

S. „ song; „ „ ᶜka k'e

C. „ ₍sung ; „ 角 ᶜkái lat₂

Loot (vb.)

M. 搶奪 ch'iang^{3} to^{2}
S. „ „ ᶜts'iang tuh
C. „ „ ᶜts'öng tüt$_{2}$

—— (sb.)

M. 搶的東西 ch'iang^{3} ti tung^{1}-hsi
S. „ 着个物事 ᶜts'iang dzak kuh meh z^{2}
C. „ 奪之物 ᶜts'öng tüt$_{2}$ ˌchí mat$_{2}$

Lose

M. 丟 tiu^{1}; 失 shih^{1}
S. 失脫 seh t'eh
C. (2) shat$_{5}$; 唔見 ˌm kín^{2}

To —— hope

M. 失望 shih^{1} wang^{4}
S. „ „ seh maung^{2}
C. „ „ shat$_{5}$ mong^{2}

To —— 'face'

M. 丟臉 tiu^{1} lien^{3}
S. 無面孔 m mien^{2} ᶜk'ong
C. 丟臉 ˌtíú lím^{2}; 失臉 shat$_{5}$ lím^{2}

To —— time

M. 耽悞工夫 tan^{1} wu^{4} kung^{1} fu^{1}
S. „ 擱 „ „ tan kauh kong foo
C. 失時 shat$_{5}$ ˌshí

To lose one's way

M. 走錯了 tsou^{3} ts'o^{4} lo
S. 迷路 mi loo^{2}
C. 失 „ shat$_{5}$ lò^{2}

Loss

To suffer ——

M. 吃虧 ch'ih^{1} k'uei^{1}
S. „ „ chuh kw'e
C. 受 „ shau^{2} ˌk'wai

Louse

M. 虱子 shih^{1}-tzŭ
S. „ seh
C. „ shat$_{5}$; 虱嫲 shat$_{5}$ ᶜná

Low

M. 低 ti^{1}; 矮 ai^{3}; 下 hsia^{4}
S. „ ti; „ ᶜa; „ ᶜ"au
C. „ ˌtai; „ ᶜai; „ há^{2}

The wall is ——

M. 牆矮 ch'iang^{2} ai^{3}
S. „ 頭低 ziang deu ti
C. „ 矮 ˌts'öng ᶜai

—— ground

M. 窪地 wa^{1} ti^{4}
S. 低 „ ti di^{2}
C. „ „ ˌtai téi^{2}

—— class

M. 下等 hsia^{4} têng^{3}
S. „ „ ᶜ"au ᶜtung
C. „ „ há^{2} ᶜtang

Machine

M. 機器 chi[1] ch'i[4]
S. „ „ kyi chi˒
C. „ „ ˌkéi héi˒

Mad

M. 瘋了 fêng[1] lo
S. 發癡 fah ts'
C. 癲 ˌtín ; 狂 ˌk'wong

A —— dog

M. 瘋狗 fêng[1] kou[3]
S. 邪 „ zia ˈkeu
C. 癲 „ ˌtín ˈkaú

Made

—— of wood

M. 木頭做的 mu[4]-t'ou tso[4] ti
S. „ „ „ 个 mok deu tsoo˒ kuh
C. „ 做嘅 muk˧ tsò[2] ké˒

Magazine

Powder ——

M. 火藥局 huo[3]-yao[4] chü[2]
S. „ „ „ ˈhoo yak jok
C. „ „ „ ˈfo yök˧ kuk˧

Magistrate

District ——

M. 知縣 chih[1] hsien[4] ; 知事 chih[1] shih[4]
S. „ „ ts yoen˒; (2) ts z˒
C. „ „ ˌchí yün[2]*; (2) ˌchi sz[2]

Major

M. 協參領 hsieh[2] ts'an[1] ling ; 陸軍少校 lu[4] chün[1] shao[3] hsiao[4]
S. (1) hie ts'en ˈling ; (2) lok kyuin ˈsau chiau
C. 督隊官 tuk˧ tui[2] ˌkwún; (2) luk˧ ˌkwan ˈshiú káú˒

Make

M. 做 tso[4]
S. „ tsoo˒
C. „ tsò[2]; 整 ˈching

To —— a bed

M. 鋪床 p'u[4] ch'uang[2]
S. „ „ p'oo zaung
C. „ „ ˌp'ò ˌch'ong

Cannot ——

M. 做不了 tso[4] pu liao[3]
S. 勿能做 'veh nung tsoo˒
C. 唔整得 ˌm ˈching tak˧; 唔做得 ˌm tsò[2] tak˧

Man

M. 人 jên[2]
S. „ nyung
C. „ ˌyan

A young ——

M. 年輕的人 nien[2] ch'ing[1] ti jên[2]
S. 少年人 sau˒ nyien nyung
C. „ „ „ shíú˒ ˌnín ˌyan

Manage

M. 管 kuan^{3}; 辦理 pan^{4} li^{3}*
S. „ ᶜkwen; „ „ banˀ ᶜli
C. „ ᶜkwún; „ „ pán^{2} ᶢléi

To —— an affair

M. 辦事 pan^{4} shih^{4}
S. „ „ banˀ zˀ
C. „ „ pán^{2} sz^{2}

Unable to ——

M. 辦不了 pan^{4} pu liao^{3}
S. 勿會辦 'veh we banˀ
C. 唔辦得 ᶢm pán^{2} takˌ

Mandarin

M. 官 kuan^{1}
S. „ kwen
C. „ ᶜkwún

—— dialect

M. 官話 kuan^{1} hua^{4}
S. „ „ kwen woˀ
C. „ „ ᶜkwún wá^{2}*

Many

M. 多 to^{1}
S. „ too
C. „ ᶜto (*or* ₒto)

—— people

M. 人多 jên^{2} to^{1}
S. „ „ nyung too; 許多人 ᶜhyui too nyung
C. 人多 ᶢyan ᶜto

Many times

M. 好些次 hao^{3} hsieh^{1} tz'ŭ^{4}
S. „ 幾回 ᶜhau ᶜkyi we
C. 多次 ᶜto ts'zˀ

How —— ?

M. 多少 to^{1}-shao^{3}
S. 幾化 ᶜkyi hauˀ
C. 有幾多 ᶢyaú ᶜkéi ₒto

—— thanks!

M. 多謝 to^{1} hsieh^{4}
S. „ „ too zia
C. „ „ ᶜto tse^{2}

Map

M. 地理圖 ti^{4} li^{3} t'u^{2}
S. „ „ „ diˀ ᶜli doo
C. „ „ „ téi^{2} ᶢléi ᶢt'ò*

March (month)

M. 三月 san^{1} yüeh^{4}
S. „ „ san nyoeh
C. 英三月 ᶜying ᶜsám yütₒ

March (troops)

M. 走 tsou^{3}
S. „ ᶜtseu
C. 行軍 ᶢhang ᶜkwan; 進軍 tsunˀ ᶜkwan

The troops have marched

M. 兵走了 ping^{1} tsou^{3} lo
S. „ „ „ ping ᶜtseu liau
C. 已經行軍咯 ᶜyí ᶜking ᶢhang ᶜkwan lokₒ

Mare

M. 騍馬 k'o^4 ma^3

S. 雌 „ ts' ˂mo

C. 馬嫲 ˂má ˂ná

Mark (sb.)

M. 號 hao^4; 記號 chi^4-hao^4

S. „ 'au˃; „ „ kyi˃ 'au˃

C. „ hò^2; „ „ kéi˃ hò^2

—— (vb.)

M. 打印 ta^3 yin^4; 畫 hua^4

S. 做記號 tsoo˃ kyi˃ 'au˃; (2) wo˃

C. (1) ˂tá yan˃

To hit the ——

M. 打中了 ta^3 chung^4 lo

S. „ „ ˂tang tsong˃

C. „ „ ˂tá chung˃

Market

M. 市 shih^4

S. „ ˂z; 市面 'z mien˃

C. „ ˂shí; 欄˂lán; 街市 ˂kái ˂shí; 市頭 ˂shí ˍt'aú

—— price

M. 市價 shih^4 chia^4; 行價 hang^2 chia^4

S. (1) ˂z ka˃

C. (2) ˂shí ká˃

To go to ——

M. 趕集去 kan^3 chi^4 ch'ü^4

S. 上街 „ ˂zaung ka chi˃

C. 去 „ 市 hui˃ ˂kái ˂shí

Market town

M. 鎮店 chên^4 tien^4

S. 市鎮 ˂z tsung˃

C. „ „ ˂shi chan˃

Marsh

M. 水地 shui^3 ti^4

S. 濕 „ sak di˃

C. „ „ ˂shui téi^2; 澤 chák$_2$

Mast

M. 桅杆 wei^2 kan^1

S. „ „ we ken; 檣子 ziang ˂ts

C. „ „ ˍwai ˂kon

Master

M. 主人 chu^3 jên^2

S. „ „ ˂tsu nyung

C. „ „ ˂chü ˍyan; 事頭 sz^2 ˍt'aú*

—— of a ship

M. 船主 ch'uan^2 chu^3

S. „ „ zen ˂tsu; 老大 ˂lau da˃

C. „ „ ˍshün ˂chü

—— (of a household)

M. 東家 tung^1-chia

S. „ „ tong ka

C. „ „ ˂tung ˂ká

—— (teacher)

M. 先生 hsien^1-shêng; 老師 lao^3 shih^1

S. (1) sien sang

C. (1) ˂sín ˂sháng; (2) ˍlò ˂sz

Mat

M. 蓆 hsi²
S. „ zih
C. „ tsek₂†

Matches

M. 取燈兒 ch'ü³ têng¹ 'rh; 自來火 tzŭ⁴ lai² huo³
S. (2) z' le ᶜhoo; 洋火 yang ᶜhoo
C. 火柴 ᶜfo ₍shái (*or* ₍ch'ái)

Mattress

M. 褥子 ju⁴-tzŭ
S. „ „ nyok ᶜts
C. 牀褥 ₍ch'ong yuk₂*

Me

M. 我 wo³
S. „ ᶜngoo
C. „ ᶜngo

Mean (vb.)

M. 有意思 yu³ i⁴ ssŭ
S. „ „ „ ᶜyeu i' s'; 想 ᶜsiang
C. „ „ „ ᶜyaú yi' sz'

What does it —— ?

M. 有什麼意思 yu³ shê(n)²-mo i⁴-ssŭ
S. 啥意思 sa' i' s'
C. 係乜意思呢 hai² mat₂ yi' sz' ₍ni

Measure (vb.)

M. 量 liang²
S. „ liang
C. „ löng²; 度 tok₂

To —— the length of a wall

M. 量量牆有多長 liang² liang² ch'iang² yu³ to¹ ch'ang²
S. 量量牆頭幾化長 liang liang ziang deu ᶜkyi hau' dzang
C. 量個幅牆有幾長 löng² ko' fuk₂ ₍ts'öng ᶜyaú ᶜkéi ₍ch'öng

Meat

M. 肉 jou⁴
S. „ nyok
C. „ yuk₂

Medicine

M. 藥 yao⁴
S. „ yak
C. „ yök₂

A dose of ——

M. 一劑藥 i chi⁴ yao⁴
S. „ „ „ ih tsi yak
C. „ „ „ yat₂ ₍tsai yök₂

To take ——

M. 喫藥 ch'ih¹ yao⁴
S. „ „ chuh yak
C. 食 „ shik₂ yök₂

Meet

M. 遇見 yü⁴ chien⁴; 碰見 p'êng⁴ chien⁴; 迎 ying²
S. 碰着 bang' dzak; 迎接 nyung tsih
C. 遇 „ yü² chök꜀

Melon

M. 甜瓜 t'ien² kua¹
S. „ „ dien kwo
C. 瓜 ꜀kwá

Water ——

M. 西瓜 hsi¹ kua¹
S. „ „ si kwo
C. „ „ ꜀sai ꜀kwá

Mend

M. 修理 hsiu¹ li³; 收拾 shou¹ shih
S. 補 ꜆poo; (1) sieu ꜆li
C. „ 翻 ꜆pò ꜀fán; 修整 ꜀saú ꜆ching

Merchant

M. 買賣人 mai³-mai⁴ jên²
S. 商 saung; 商家 saung ka
C. „ 人 ꜀shöng ꜀yan

Messenger

M. 送信的 sung⁴ hsin⁴ ti
S. „ „ 个 song' sing' kuh
C. 帶信人 tái' sun' ꜀yan

Metal

M. 五金類 wu³ chin¹ lei⁴
S. „ „ „ 'ng kyung le'
C. „ „ „ ꜆ng ꜀kam lui²

Middle

M. 中 chung¹
S. „ tsong
C. „ ꜀chung

In the ——

M. 中間 chung¹ chien¹
S. „ „ tsong kan
C. 在中間 tsoi² ꜀chung ꜀kán

Mile (Chinese = about $\frac{1}{3}$ English mile)

M. 里 li³
S. „ ꜆li
C. „ ꜆léi

Military

M. 武 wu³
S. „ ꜆voo
C. „ ꜆mò

—— affairs

M. 軍務 chün¹ wu⁴
S. „ „ kyuin voo'
C. „ „ ꜀kwan mò²

—— officers

M. 武官 wu³ kuan¹
S. „ „ ꜆voo kwen
C. „ „ ꜆mò ꜀kwún

Military orders

M. 軍令 chün[1] ling[4]
S. „ „ kyuin ling˃
C. „ „ ˂kwan ling[2]

—— **tactics**

M. 兵法 ping[1] fa[3]
S. „ „ ping fah
C. „ „ ˂ping fát˳

Milk

M. 奶 nai[3]
S. „ ˂na
C. „ ˂nái

Cow's ——

M. 牛奶 niu[2] nai[3]
S. „ „ nyeu ˂na
C. „ „ ˂ngaú ˂nái

Mill

M. 磨 mo[4]
S. „ 子 moo˃ ˂ts ; 磨坊 moo˃ faung
C. „ mo[2]

A wind ——

M. 風磨 fêng[1] mo[4]
S. „ „ fong moo˃
C. „ „ ˂fung mo[2]

Mine (pron.)

M. 我的 wo[3] ti
S. „ 个 ˂ngoo kuh
C. „ 嘅 ˂ngo ke˃

(sb.) **a coal mine**

M. 煤窰 mei[2] yao[2]
S. „ 礦 me kw'aung˃
C. „ „ ˂mui k'wong˃

A silver ——

M. 銀礦 yin[2] kung[3]
S. „ „ nyung kw'aung˃
C. „ „ ˂ngan k'wong˃

—— **(mil.)**

M. 地(水)雷 ti[4] (shui[3]) lei[2]
S. „ („) „ di˃ (˂s) le
C. „ („) „ téi[2] (˂shui) ˂lui

Minister (envoy)

M. 欽差 ch'in[1] ch'ai[1]
S. „ „ chung ts'a
C. „ „ ˂yam ˂ch'ái

Minute (time)

M. 分 fên[1]
S. „ fung
C. 味呢 ˂mi ˂ni

—— **(small)**

M. 細小 hsi[1] hsiao[3]
S. „ „ si˃ ˂siau
C. „ 微 sai˃ ˂méi, *or* ˂méi sai˃

Miss (vb.)

M. 失 shih[1]
S. „ seh
C. „ shat˳

To miss the mark

M. 失中 shih¹ chung¹

S. „ „ seh tsong⁾

C. 唔 „ ˩m chung⁾

To —— an opportunity

M. 錯過機會 ts'o⁴ kuo⁴ chi¹-hui⁴

S. „ „ „ „ ts'oo⁾ koo⁾ kyi we⁾

C. 失機會 shat˩ ˩kéi wúi²

To —— the road

M. 走岔了道 tsou³ ch'a⁴ lo tao⁴

S. 迷路 mi loo⁾

C. 失 „ shat˩ lò²

Missionary

M. 傳教的 ch'uan² chiao¹ ti

S. „ 道个 dzen dau⁾ kuh

C. „ 教 (*or* 道) 人 ˩ch'ün káú⁾ (*or* tò²) ˩yan

Mistake

M. 錯 ts'o⁴

S. „ ts'oo⁾; 差 ts'o

C. „ ts'o⁾

Mix

M. 攙和 ch'an¹ ho

S. 和 'oo⁾; 併和 ˁping 'oo⁾

C. 攪勻 ˁkáú ˩wan; 調和 ˩t'íú ˩wo

To mix mortar

M. 和泥 ho² ni²

S. „ „ 灰 'oo⁾ nyi hwe

C. „ „ ˩wo ˩nai

Mobilize

M. 整備兵士 chêng³ pei⁴ ping¹ shih⁴

S. „ „ „ „ tsung peh ping ˁz

C. „ „ „ „ ˁching péi² ˩ping ˩sz

Moment

M. 一會兒 i hu(i)⁴ 'rh

S. „ 歇 ih hyih

C. „ 陣 yat˩ chan²; 一陣間 yat˩ chan² ˩kán

He went a —— ago

M. 剛纔走了 kang¹ ts'ai² tsou³ lo

S. 方 „ „ faung k'an ˁtseu

C. 佢去咀一陣呎 ˩k'ui huí⁾ ˁcho yat˩ chan² chek˩

Monday

M. 禮拜一 li³-pai i¹

S. „ „ „ ˁli pa⁾ ih

C. „ „ „ ˩lai pái⁾ yat˩

Money

M. 錢 ch'ien²; 銀子錢 yin²-tzŭ ch'ien²

S. (1) dzien; 銅錢 dong dien; 銀錢 nyung dzien

C. (1) ˩ts'ín*; 銀 ˩ngan*

Ready money

M. 現銀子 hsien^{4} yin^{2}-tzŭ

S. „ „ yien^{3} nyung; 現錢 yien^{3} dien

C. 現銀 yín^{2} ᶜngan*

To change ——

M. 換錢 huan^{4} ch'ien^{2}

S. „ „ wen^{3} dien

C. 換銀 wún^{2} ᶜngan*

Monk (Buddhist)

M. 和尚 ho^{2}-shang^{4}

S. „ „ ᶜoo zaung^{3}

C. „ „ ᶜwo shöng^{2}*

—— (Taoist)

M. 道士 tao^{4} shih^{4}

S. „ „ dau^{3} ᶜz

C. „ „ tò^{2} sz^{2} (*or* sz^{2}*)

Month

M. 月 yüeh^{4}

S. „ nyoeh

C. „ yüt$_{2}$

Last ——

M. 上月 shang^{4} yüeh^{4}

S. „ „ ᶜzaung nyoeh

C. „ „ shöng^{2} yüt$_{2}$

Next ——

M. 下月 hsia^{4} yüeh^{4}

S. „ „ ᶜ'au nyoeh

C. „ „ há^{2} yüt$_{2}$

What is the day of the month?

M. 今兒個幾兒了 chi(n)^{1} 'rh ko chi^{3} 'rh lo

S. 今朝幾是 kyung tsau ᶜkyi ᶜz

C. 今日月幾呢 ᶜkam yat$_{2}$ (*or* mat$_{2}$) yüt$_{2}$ ᶜkéi ᶜni

Moon

M. 月 yüeh^{4}; 月亮 yüeh^{4} liang

S. (1) nyoeh; (2) nyoeh liang^{3}

C. (1) yüt$_{2}$

The —— is waxing

M. 月亮長 yüeh^{4} liang chang^{3}

S. „ „ 漲 nyoeh liang^{3} dzang

C. „ 盈 yüt$_{2}$ ᶜying; 月生大 yüt$_{2}$ ᶜsháng tái^{2}

The —— is waning

M. 月亮虧 yüeh^{4} liang k'uei^{1}

S. „ „ „ nyoeh liang^{3} kw'e

C. „ 缺 yüt$_{2}$ k'üt$_{o}$

The —— is full

M. 月亮圓了 yüeh^{4} liang yüan^{2} lo

S. „ „ „ „ nyoeh liang^{3} yoen liau

C. „ 滿 yüt$_{2}$ ᶜmún

Moon, the new

M. 月牙兒 yüeh^{4} ya^{2} 'rh

S. 新月 sing nyoeh

C. „ „ ˌsan yütˌ

More

M. 更多 kêng^{1} to^{1}

S. 越 „ yoeh too

C. 更 „ kangˀ ˌto

—— than 200 people

M. 二百多人 êrh^{4} pai^{3} to^{1} jên^{2}

S. „ „ „ „ nyiˀ pak too nyung

C. „ „ „ „ yí^{2} pákˌ ˌto ˌyan

Not —— than 20 ft. high

M. 高不過兩丈 kao^{1} pu^{4} kuo^{4} liang^{3} chang^{4}

S. 勿過二丈高 'veh kooˀ liang dzang kau

C. 不過兩丈高 patˌ kwoˀ ˧lông chöng^{2} ˌkò

A little ——

M. 多一點兒 to^{1} i^{1} tie(n)^{3} 'rh

S. „ „ „ 點 too yi ˈtien ˈtien

C. „ 啲的咁多 ˌto ˌti kom^{1} ˌto

Is there any more?

M. 還有麼 hai^{2} yu^{3} mo

S. „ „ 勿有 wan ˈyeu 'veh ˈyeu

C. 重 „ 冇 chung^{2} ˧yaú ˧mò

Morning

M. 早起 tsao^{3}-ch'i

S. „ „ ˈtsau ˈchi; 早晨 ˈtsau zung

C. 朝 ˌchíú

Early in the ——

M. 清早 ch'ing^{1} tsao^{3}

S. „ „ ts'ing ˈtsau

C. 朝頭早 ˌchíú ˌt'aú ˈtsò

Most

M. 頂多 ting^{3} to^{1}; 最多 tsui^{4} to^{1}

S. (1) ˈting too; (2) tsoeˀ too

C. 至多 chíˀ ˌto

Mother

M. 母親 mu^{3}-ch'in

S. „ „ ˈmoo ts'ing

C. „ „ mò ˌts'an; 老母 ˧lò ˧mò

Motor

M. 汽車 ch'i^{4} ch'ê^{1}; 摩特車 mo^{2}-t'ê^{4} ch'ê^{1}

S. (1) chiˀ ts'o

C. 電車 tín^{2} ˌch'é

Mountain

M. 山 shan[1]
S. „ san
C. „ ˌshán

Mouth

M. 嘴 tsui[3]; 口 k'ou[3]
S. „ ʿts; „ ʿk'eu
C. (2) ʿhaú

—— of a river

M. 河口 ho[2] k'ou[3]
S. „ „ 'oo ʿk'eu
C. „ „ ˌho ʿhaú

Move

M. 動 tung[4]; 挪 no[2]
S. „ ʿdong; „ na
C. „ tung[2]; 郁 yukˌ

To —— one's abode

M. 搬家 pan[1] chia[1]
S. „ 塲 pen dzang
C. „ 屋 ˌpún ukˌ

Much

M. 多 to[1]
S. „ too
C. „ ˌto

—— better

M. 好多了 hao[3] to[1] lo
S. „ 得多 ʿhau tuh too
C. „ „ „ ʿhò takˌ ˌto

Twice as much

M. 多一倍 to[1] i pei[4]
S. „ „ „ too ih beˀ
C. „ „ „ ˌto yatˌ p'uiˀ

How —— ?

M. 多少 to[1]-shao[3]
S. 幾化 ʿkyi hauˀ
C. 多少呢 ˌto ʿshíú ˌni; 幾多 ʿkéi ˌto

Mud

M. 泥 ni[2]
S. 爛泥 lanˀ nyi
C. 泥 ˍnai

A —— wall

M. 土牆 t'u[3] ch'iang[2]
S. 泥 „ nyi ziang
C. „ „ ˍnai ˍts'öng

Mulberry (tree)

M. 桑樹 sang[1] shu[4]
S. „ „ saung zuˀ
C. „ „ ˌsong shüˀ

Mule

M. 騾子 lo[2]-tzŭ
S. „ „ loo ʿts
C. „ ˍlui

Must

M. 必 pi[4]; 必須 pi[4] hsü[1]; 必得 pi[4] tei[3]
S. (1) pih; (2) pih sui; (3) pih tuh
C. (1) pítˌ

Mutiny

M. 反 fan³; 作反 tso⁴ fan³
S. (1) ᶜfan; 造 „ ᶜzau ᶜfan
C. (1) ᶜfán; (2) tsok₀ ᶜfán

Mutton

M. 羊肉 yang² jou⁴
S. „ „ yang nyok
C. „ „ ᶜyöng yuk₂

My

M. 我的 wo³ ti
S. „ 个 ᶜngoo kuh
C. „ 嘅 ᶜngo keˀ

Nail (sb.)

M. 釘子 ting¹-tzŭ
S. „ ting
C. „ ᶜteng†

—— (vb.)

M. 釘 ting¹; 釘上 ting¹ shang
S. (1) ting; 敲釘 kʻau ting
C. (1) ᶜteng†

Name

M. 名子 ming²-tzŭ
S. „ 字 ming-zˀ
C. „ ᶜmeng†

Family ——

M. 姓 hsing⁴
S. „ singˀ
C. „ singˀ

What is his name?

M. 他姓甚麼 tʻa¹ hsing⁴ shê(n)²-mo
S. 伊 „ 啥 yi singˀ saˀ
C. 佢 „ 乜 ᶜkʻui singˀ matˌ

What is your —— **?**

M. 貴姓 kuei⁴ hsing⁴
S. „ „ kweˀ singˀ
C. „ „ kwaiˀ singˀ

Narrow

M. 窄 chai³
S. 狹 ʻah
C. 窄 chák₀

Naval

M. 海軍的 hai³ chün ti
S. „ „ 个 ᶜhe kyuin kuh
C. 水師 ᶜshui ₀sz; 海軍 ᶜhoi ᶜkwan

—— **officer**

M. 水師官 shui³ shih kuan¹
S. „ „ „ ᶜsoe-s kwen
C. „ „ „ ᶜshui ₀sz ᶜkwún

—— **engagement**

M. 水戰 shui³ chan⁴
S. „ „ ᶜsoe tsenˀ
C. „ „ ᶜshui chinˀ

Navy

M. 水軍 shui³ chün¹; 海軍 hai³ chün¹
S. (1) ᶜsoe kyuin; (2) ᶜhe kyuin
C. (1) ᶜshui ᶜkwan; (2) ᶜhoi ᶜkwan

Near

M. 近 chin⁴
S. „ ʿjung
C. „ kan² *or* ʿk'an

Necessary

M. 須要 hsü¹ yao⁴; 要緊 yao⁴ chin³
S. (2) iau' ʿkyung; 必須个 pih sui kuh
C. (1) ˌsui yíú'; (2) yíú' ʿkan

—— **articles**

M. 需用的東西 hsü¹ yung⁴ ti tung¹-hsi
S. 必需用个物事 pih sui yong kuh meh-z'
C. 須要嘅物件 ˌsui yíú' ke' mat˧ kín²*

Neck

M. 脖子 po²-tzŭ
S. 頸骨 ʿkyung kweh
C. „ ʿkeng†

Need (vb.)

M. 須用 hsü¹ yung⁴; 要用 yao⁴ yung⁴
S. 要 iau'; (2) iau' yong'
C. 須要 ˌsui yíú'

You —— not return

M. 你不用回來 ni² pu yung⁴ hui² lai
S. 儂勿必回來 nong' 'veh pih we le
C. 你唔使翻嚟 ʿnéi ˌm ʿshai ˌfán ˌlai

No —— to be frightened

M. 不必害怕 pu pi⁴ hai⁴ p'a⁴
S. 勿要怕 'veh iau' p'o'
C. 唔使慌 ˌm ʿshai ˌfong

Needle

M. 針 chên¹
S. „ tsung
C. „ ˌcham

Neither

M. 不 pu⁴
S. 勿 'veh
C. 亦不 yik˧ pat˧

—— **. . . . nor**

M. 不 pu⁴ . . . . 不 pu⁴
S. 勿 'veh . . . . 勿 'veh
C. 唔係 ˌm hai² . . . . 又唔係 . . . . yaú² ˌm hai²

Net

M. 網 wang³
S. „ ʿmaung
C. „ ʿmong

Never

M. 總沒 tsung³ mei²; 永不 yung³ pu⁴

S. 决勿 kyoeh 'veh; 總勿 dzong 'veh

C. 未曾 ˌmei ts'ang²; 從未 ˌts'ung ˌméi

—— **permit**

M. 永不准 yung³ pu chun³

S. „ 勿許 iung 'veh ˇhyui

C. „ 不准 ˇwing pat˩ ˇchun

New

M. 新 hsin¹

S. „ sing

C. „ ˌsan

News

M. 新聞 hsin¹ wên²; 信息 hsin¹ hsi

S. (1) sing vung; (2) sing˃ sih

C. (1) ˌsan ˌman

There is no —— (of somebody)

M. 沒有信兒 mei² yu³ hsi(n)⁴ 'rh

S. 毫無信息 'au m sing˃ sih

C. 冇聲氣 ˇmò ˌsheng† héi˃

Newspaper

M. 新聞報 hsin¹ wên² pao⁴

S. „ „ „ sing vung pau˃

C. „ „ 紙 ˌsan ˌman ˇchí

Next

M. 次 tz'u⁴; 第二 ti⁴ êrh⁴

S. (1) ts'˃; (2) di˃ nyi˃

C. (2) tai² yí²

—— **day**

M. 第二天 ti⁴ êrh⁴ t'ien¹

S. „ „ 日 di˃ nyi˃ nyih

C. „ „ „ tai² yí² yat˩

—— **year**

M. 明年 ming² nien²

S. „ „ ming nyien

C. „ „ ˌming ˌnín; 出年 chut˩ ˌnín

Night

M. 夜 yeh⁴

S. „ ya˃

C. „ ye²; 晚 ˇmán

At ——

M. 夜裏 yêh⁴ li; 夜間 yeh⁴ chien

S. (1) ya˃ ˇli

C. 晚間 ˇman ˌkán

The whole ——

M. 一夜 i¹ yeh⁴

S. „ „ ih ya˃; 全夜 dzien ya˃

C. 成 „ ˌsheng† ye²

Midnight

M. 半夜 pan⁴ yeh⁴

S. „ „ 把 pen˃ ya˃ ˇpo

C. „ „ pún˃ ye²

Nine

M. 九 chiu³
S. „ ᶜkyeu
C. „ ᶜkaú

No

M. 不是 pu² shih
S. 勿 „ 'veh ᶜz ; 沒 meh
C. 唔係 ˌm hai²

—— **use**

M. 沒用處 mei² yung⁴ ch'u
S. 無 „ m yong²
C. 冇 „ ᶜmò yung²

Noon

M. 晌午 shang³ wu
S. 日中 nyih tsong
C. 晏晝 án² chaú²

None

M. 沒有 mei² yu³
S. 無沒 m meh ; 勿有 'veh ᶜyeu
C. 冇 ᶜmò

North

M. 北 pei³
S. „ pok
C. „ pakˌ

That town is in the ——

M. 那個城在北邊 na⁴-ko ch'êng² tsai pei³ pien
S. 該个城是在北邊 ke kuh dzung ᶜz ᶜdze pok pien
C. 個城喺北邊 ko² ˌsheng† ᶜhai pakˌ pín²

The —— Pole

M. 北極 pei³ chi²
S. „ „ pok juh
C. „ „ pakˌ kikˌ

—— **west**

M. 西北 hsi¹ pei³
S. „ „ si pok
C. „ „ ˌsai pakˌ

Nose

M. 鼻子 pi²-tzŭ
S. „ 頭 bih deu
C. „ 哥 p'éi² ˌko

Nose-bag

M. 馬鼻囊 ma³ pi⁴ nang²
S. „ „ 袋 ᶜmo bih de²
C. „ „ 囊 ᶜma p'éi² ˌnong

Not

M. 不 pu⁴
S. 勿 'veh
C. „ patˌ ; 唔係 ˌm hai²

Nothing

M. 沒有甚麼 mei². yu³ shê(n)²-mo
S. 無啥 m sa²
C. 冇野 ᶜmò ᶜye

There is nothing to eat

M. 沒有吃的 mei² yu³ ch'ih¹ ti

S. 無啥 „ m sa˒ chuh

C. 冇野食 ˩mò ˩ye shik₂

To fear ——

M. 甚麼也不怕 shê(n)²-mo yeh³ pu p'a⁴

S. 勿怕啥 'veh p'o˒ sa˒

C. 乜野都唔怕 mat₅ ˩ye ₒtò ₍m p'á˒

Notice (noun)

M. 告白 kao⁴ pai²

S. „ „ kau˒ bak

C. „ „ ko˒ pák₂

Official ——

M. 告示 kao⁴ shih⁴

S. „ „ kau˒ z˒

C. „ „ ko˒ shí²

—— (vb.)

M. 理會 li³ hui⁴

S. „ „ ˩li we˒

C. „ „ ˩léi wúi²

November

M. 十一月 shih² i¹ yüeh⁴

S. „ „ „ zeh ih nyoeh

C. 英十一月 ˍying shap₂ yat₅ yüt₂

Now

M. 現在 hsien⁴ tsai⁴; 如今 ju² chin¹

S. (1) yien˒ ˩dze; 眼前 ˩ngan zien

C. (1) yín² tsoi²; (2) ˩yü ˍkam; 而家 ˩yí ˍká

Nowhere

M. 那裏也沒有 na³-li yeh³ mei² yu³

S. 無啥地方 m sa˒ di˒ faung

C. 冇處 ˩mo ch'ü˒

—— to be found

M. 四面不見 ssŭ⁴ mien⁴ pu chien⁴

S. „ „ 勿 „ s˒ mien˒ 'veh kyien˒

C. 冇處可尋得出 ˩mò ch'ü˒ ˩ho ˍts'am tak₅ ch'ut₅; 四處尋不見 sz˒ ch'ü˒ ˍts'am pat₅ kín˒

Number

M. 數目 shu⁴ mu⁴; 數 shu⁴

S. „ „ soo mok; „ soo

C. „ „ shò˒ muk₂; „ shò˒

Oats

M. 油麥 yu² mai⁴

S. 燕 „ ien˒ mak

C. 大 „ tái² mak₂; 粗麥 ˍts'ò mak₂

Obedient

M. 聽話 t'ing^{1} hua^{4}

S. 順從 zung^{2} dzong; 聽人說話 t'ing nyung seh wo^{2}

C. 聽話嘅 ˏt'eng† wá^{2} ke^{2}

Obey

M. 聽命 t'ing^{1} ming^{4}; 順從 shun^{4} ts'ung^{2}

S. 依順 i zung^{2}; 肯聽說話 k'ung t'ing seh wo^{2}

C. 聽話 ˏt'eng† wá^{2}

Oblong

M. 長方 ch'ang^{2} fang^{1}

S. „ „ dzang faung

C. „ „ ˏch'öng ˏfong; 日字樣 yat$_{2}$ tsz^{2} yong^{2}*

Observe

M. 看 k'an^{4}; 觀看 kuan^{1} k'an^{4}

S. (1) k'oen^{2}; 看察 k'oen^{2} ts'ah

C. 睇 ˇt'ai

To —— the law

M. 守王法 shou^{3} wang^{2} fa

S. „ „ „ ˇseu waung fah

C. „ 國 „ ˇshaú kwok$_{6}$ fát$_{6}$

Obstinate

M. 固執 ku^{4} chih

S. „ „ koo^{2} tsuh

C. „ „ kwú^{2} chap$_{5}$

He has a very obstinate disposition

M. 他的脾氣狠硬 t'a^{1} ti p'i^{2}-ch'i hên^{3} ying^{4}

S. 伊个性情極固執 yi kuh sing^{2} dzing juh koo^{2} tsuh

C. 佢嘅皮氣好硬嘅 ˇk'ui ke^{2} ˏp'éi héi^{2} ˇhò ngáng^{2} ke^{2}

Obtain

M. 得 tê^{2}

S. „ 到 tuh tau^{2}

C. „ tak$_{5}$

Occupy (mil.)

M. 佔 chan^{4}

S. „ 據 tsien^{2} kyui^{2}

C. „ „ chím^{2} kui^{2}

To —— a house

M. 住房 chu^{4} fang^{2}

S. „ „ dzu^{2} vaung

C. „ 屋 chü^{2} uk$_{5}$

Ocean

M. 大海 ta^{4} hai^{3}; 洋 yang^{2}

S. „ „ doo^{2} ˇhe; „ yang

C. „ „ tái^{2} ˇhoi; „ ˏyöng

The Pacific ——

M. 太平洋 t'ai^{4} p'ing^{2} yang^{2}

S. „ „ „ t'a^{2} bing yang

C. „ „ „ t'ái^{2} ˏping ˏyöng

October

M. 十月 shih[2] yüeh[4]
S. „ „ zeh nyoeh
C. 英十月 ˌying shapˌ yütˌ

Of (sign of the possessive)

M. 的 ti[1]
S. 个 kuh
C. 嘅 keˀ

Off

Be ——

M. 走罷 tsou[3] pa; 去罷 ch'ü[4] pa
S. (1) ˁtseu ˁba; (2) chiˀ ˁba
C. 扯咯 ˁch'e lokₒ

To take —— one's clothes

M. 脫衣裳 t'o[1] i[1]-shang
S. „ „ „ t'oeh i-zaung
C. „ „ „ t'ütₒ ˌyí ˏshöng

Offer

M. 奉上 fêng[4] shang[4]; (a gift) 送 sung[4]
S. (1) vongˀ ˁzaung; (2) songˀ
C. (1) fung[2] shöng[2]; (2) sungˀ

To —— a price

M. 出價 ch'u[1] chia[4]; 還價 huan[2] chia[4]
S. (1) ts'eh kaˀ; (2) wan kaˀ
C. (1) ch'utˌ káˀ

Officer

M. 官 kuan
S. „ kwen
C. „ ˌkwún

A military officer

M. 武官 wu[3] kuan[1]
S. „ „ ˁvoo kwen
C. „(軍)官 ˏmò(ˌkwan) ˌkwún

A naval ——

M. 水師官 shui[3] shih[1] kuan[1]
S. „ „ „ ˁsoe-s kwen; 海軍官 ˁhe kyuin kwen
C. 水師官 ˁshui ˌsz ˌkwún

Often

M. 常 ch'ang[2]; 好些次 hao[3] hsieh tz'ŭ[4]
S. 好幾回 ˁhau ˁkyi we
C. 屢次 ˏlui ts'zˀ

How —— ?

M. 多少次 to[1] shao[3] tz'ŭ[4]
S. 幾回 ˁkyi we
C. „ 多次 ˁki ˌto ts'zˀ

Oil

M. 油 yu[2]
S. „ yeu
C. „ ˏyaú

Kerosene ——

M. 煤油 mei[2] yu[2]; 火油 huo[3] yu[2]
S. (1) me yeu; (2) ˁhoo yeu
C. 火水 ˁfo ˁshui

—— cloth

M. 油布 yu[2] pu[4]
S. „ „ yeu pooˀ
C. „ „ ˏyaú pòˀ

Old

M. 老 lao³; 舊 chiu⁴
S. „ ᶜlau; „ jeu⁾
C. „ ᶣlò; „ kaú²

An —— man

M. 老頭兒 lao³ t'ou² 'rh
S. „ „ 子 ᶜlau deu ᶜts
C. „ 大 ᶣlò tái²*

—— clothes

M. 舊衣裳 chiu⁴ i¹-shang
S. „ „ „ jeu⁾ i-zaung
C. „ „ kaú² ˌyí; 古衣 ᶜkwú ˌyi

How —— are you?

M. 貴庚 kuei⁴ kêng
(to an elderly man) 高壽 kao¹ shou⁴
(to a child) 幾歲 chi³ sui⁴
(to an inferior) 你多大年紀 ni³ to¹ ta nien² chi
S. 貴庚 kwe⁾ kang
(to an elderly man) 高壽 kau zeu⁾
(to a child) 幾歲 ᶜkyi soe⁾
(to an inferior) 儂幾化年紀 nong⁾ ᶜkyi hau⁾ nyien kyi⁾
C. 貴庚 kwai⁾ ˌkang
(to an elderly man) 高壽 ˌkò shaú²
(to a child; to an inferior) 幾多歲 ᶜkéi ˌto sui⁾

On

M. 上 shang⁴
S. „ ᶜzaung
C. „ shöng²; 在 tsoi²

—— the ground

M. 在地下 tsai⁴ ti⁴ hsia
S. 拉 „ „ la⁾ di⁾ 'au⁾
C. 在 „ 上 tsoi² téi² shöng²

—— this side

M. 在這邊 tsai⁴ chê⁴ pien
S. „ 第 „ ᶜdze di⁾ pien
C. „ 呢 „ tsoi² ˌni pín²

—— purpose

M. 故意 ku⁴ i⁴; 特意 t'ê⁴ i⁴
S. „ „ koo⁾ i⁾; 有 „ yeu i⁾
C. „ „ kwú⁾ yí; 特登 tak₂ ˌtang

—— top

M. 上邊 shang⁴ pien; 上頭 shang⁴ t'ou
S. (1) ᶜzaung pien
C. 在上邊 tsoi² shöng² pín²

Once

M. 一次 i¹ tz'ŭ⁴; 一回 i¹ hui²
S. (1) ih ts'⁾; (2) ih we
C. (1) yat₂ ts'z⁾; (2) yat₂ ˌwúi

More than once

M. 不止一次 pu chih³ i tz'ŭ⁴
S. 勿 „ „ 回 'veh 'ts ih we
C. 多過 „ 次 ˌto kwo˃ yat˩ ts'z˃

At ——

M. 立刻 li⁴ k'o⁴
S. „ „ lih k'uh
C. 卽 „ tsik˩ hak˩

One

M. 一 i¹; 一個 i¹-ko
S. „ ih; „ 个 ih kuh
C. „ yat˩

—— by ——

M. 一個一個的 i¹-ko i¹-ko ti
S. „ 一 ih ih; 一个一个 ih kuh ih kuh
C. 逐一逐二 chuk˨ yat˩ chuk˨ yí²

Onion

M. 葱 ts'ung¹
S. „ ts'ong
C. „ 頭 ˌts'ung ˍt'aú

Only

M. 但 tan⁴; 但只 tan⁴ chih³
S. „ dan˃; 單獨 tan dok
C. „ tán²

There is only one

M. 不過一個 pu² kuo⁴ i¹-ko
S. „ „ „ 个 pih koo˃ ih kuh
C. „ „ „ 個 pat˩ kwo˃ yat˩ ko˃

Not ——

M. 不但 pu² tan⁴
S. 勿 „ 'veh dan˃
C. 不獨 pat˩ tuk˨

—— want one

M. 單要一個 tan¹ yao⁴
S. „ „ „ 个 tan iau˃ ih kuh
C. „ „ „ 個 ˌtán yíú˃ yat˩ ko˃

Open (vb.)

M. 開 k'ai¹
S. „ k'e
C. „ ˌhoi

It is ——

M. 開了 k'ai¹ lo
S. „ 哉 k'e tse
C. „ 咯 ˌhoi lo^{k}ₒ

Unable to ——

M. 開不開 k'ai¹ pu k'ai¹
S. 勿能 „ 'veh nung k'e
C. 唔開得 ˍm ˌhoi tak˩

Or

M. 或 huo^{4}
S. „ ᶜok
C. „ wák$_{2}$

Will you do it —— not?

M. 你做不做 ni^{3} tso^{4} pu tso^{4}
S. 做勿做 tsooˀ ’veh tsooˀ
C. 你做唔做 ˩néi tsòˀ ˩m tsòˀ

Three —— four

M. 三四個 san^{1} ssŭ^{4} ko
S. „ „ 个 san sˀ kuh
C. „ „ 個 ˩sám szˀ koˀ

Orange

M. 橘子 chü^{2}-tzŭ
S. „ „ kyoeh ᶜts
C. 橙 ˩chʻáng*; 柑 ˩kom

Order (vb.)

M. 命 ming^{4}; 吩咐 fên^{1}-fu
S. (2) fung fooˀ; 命令 mingˀ lingˀ
C. (1) ming^{2}; (2) ˩fan fúˀ

—— (noun)

M. 命 ming^{4}; 令 ling^{4}
S. „ 令 mingˀ lingˀ
C. „ ming^{2}; (2) ling^{2}

To put in ——

M. 安排 an^{1} pʻai^{2}
S. „ „ oen ba
C. „ „ ˩on ˩pʻái

In regular order

M. 挨次 ai^{1} tzʻŭ^{4}
S. „ „ a tsˀ
C. 依 „ ˩yí tsʻzˀ

Other

M. 別 pieh^{2}
S. „ bih
C. „ pít$_{2}$; 第二 tai^{2} yí^{2}

—— men

M. 別的人 pieh^{2} ti jên^{2}
S. „ 人 bih nyung
C. „ 的人 pit$_{2}$ ₀ti ˩yan

Our

M. 我們的 wo^{3} mên ti; 偺們的 tsa^{2} mên ti
S. 我呢个 ’ngoo nyiˀ kuh
C. „ 哋嘅 ˩ngo téi^{2} keˀ

Out

To come ——

M. 出來 chʻu^{1} lai
S. „ „ tsʻeh le
C. „ 嚟 chʻut, ˩lai

Gone ——

M. 出門了 chʻu^{1} mên^{2} lo
S. „ 去哉 tsʻeh chiˀ tse
C. „ „ 咯 chʻut, huiˀ lok$_{0}$

Go ——

M. 出去罷 chʻu^{1} chʻü^{4} pa
S. „ „ „ tsʻeh chiˀ ba
C. „ „ chʻut, huiˀ

Outside

M. 外頭 wai⁴-t'ou
S. „ „ nga' deu
C. „ „ ngoi² ₵t'aú

—— **the city**

M. 城外 ch'êng² wai⁴
S. „ „ dzung nga'
C. „ „ ₵sheng† ngoi²

Over (above)

M. 上 shang⁴
S. „ ᶜzaung
C. „ shöng²

To cross ——

M. 過 kuo⁴
S. „ koo'
C. „ kwo'

Left ——

M. 剩下的 shêng⁴ hsia⁴ ti
S. „ „ 个 dzung' ᶜau kuh
C. 餘剩 ₵yü shing²

Own (vb.)

M. 有 yu³
S. „ yeu
C. „ ₵yaú

—— **(confess)**

M. 認 jên⁴
S. „ nyung'
C. „ ying²

My ——

M. 我自己的 wo³ tzŭ⁴ chi ti
S. 我自家个 'ngoo z' ka kuh
C. „ „ 己嘅 ₵ngo tsz² ᶜkéi ke'

Pace

M. 步 pu⁴ [in lineal measure, a 步 = 2 paces = 5 feet]
S. 步 boo'
C. „ pò²

Pack (vb.)

M. 裝 chuang¹
S. „ tsaung
C. „ ₵chong

—— **saddle**

M. 馱鞍 to⁴ an¹
S. „ „ doo oen
C. (Not known in Canton.)

Pagoda

M. 塔 t'a³
S. „ t'ah
C. „ t'áp₀

Pain

M. 疼 t'êng²
S. 痛 t'ong'
C. „ t'ung'

To feel ——

M. 覺着疼 chüeh² cho t'êng²
S. „ „ 痛 kauh dzak t'ong'
C. 見痛 kín' t'ung'

Paper

M. 紙 chih³
S. „ ᶜts
C. „ ᶜchí

A sheet of ——

M. 一張紙 i¹ chang¹ chih³
S. „ „ „ ih tsang ᶜts
C. „ „ „ yat, ᶜchöng ᶜchí

Blotting ——

M. 吃墨紙 ch'ih¹ mo⁴ chih³
S. 吸 „ „ hyih muh ᶜts
C. 索 „ „ sok, mak, ᶜchí

Pardon (vb.)

M. 饒恕 jao² shu; 寬免 k'uan¹ mien³
S. 饒赦 nyau ᶜso
C. 赦免 she' ᶜmín

Part

M. 分 fên¹
S. „ vung'
C. „ fan²

A fourth ——

M. 四分之一 ssŭ⁴ fên¹ chih i¹
S. „ „ „ „ s' vung' ts ih
C. „ „ „ „ sz' fan² ᶜchí yat,

The greater ——

M. 多半 to¹ pan⁴
S. 大 „ doo' pen'
C. „ „ tái² pún'

Pass (defile)

M. 山口子 shan¹ k'ou³-tzŭ
S. 關 „ kwan ᶜk'eu
C. 山峽 ᶜshan háp,

A mountain ——

M. 山嶺 shan¹ ling³
S. „ „ san ling
C. „ 峽 ᶜshan háp,

—— (vb.)

M. 過 kuo⁴
S. „ koo'
C. „ kwo'

Unable to ——

M. 過不去 kuo⁴ pu ch'ü⁴
S. 勿能過去 'veh nung koo' chi'
C. 唔過得 ᶜm kwo' tak,

Passage

M. 過道 kuo⁴ tao⁴; 路 lu⁴
S. (2) loo'; 通路 t'ong loo
C. (2) lò²; 道 „ tò² lò²

—— by water

M. 水路 shui³ lu⁴
S. „ „ ᶜs loo'
C. „ „ ᶜshui lò²

Passport

M. 護照 hu⁴ chao
S. „ „ 'oo' tsau'
C. „ „ wú² chiú'

Password

M. 口號 k'ou^{3} hao^{4}
S. „ „ ˇk'eu 'auˋ
C. 暗 „ omˋ hòˏ

Path

M. 小道兒 hsiao^{3} tao^{4} 'rh
S. „ 路 ˇsiau looˋ
C. „ „ ˇsfú lòˏ

Patrol (noun)

M. 巡兵 hsün^{2} ping^{1}
S. „ „ dzing ping
C. „ „ ˏts'un ˏping

Pay

M. 給錢 kei^{3} ch'ien^{2}; 開錢 k'ai^{1} ch'ien^{2}
S. (2) k'e dien ; 付 fooˋ
C. 俾 ˇpéi ; 交 ˏkáú

To —— a debt

M. 還賬 huan^{2} chang^{4}
S. „ „ wan tsangˋ
C. „ „ ˏwán chöngˋ

Unable to ——

M. 還不起 huan^{2} pu ch'i^{3}
S. „ 勿 „ wan 'veh ˇchi
C. 唔還得 ˏm ˏwán takˏ

Peace

M. 平安 p'ing^{2} an^{1}
S. „ „ bing oen ; 平和 bing 'oo
C. „ „ ˏp'ing ˏon ; 和 ˏwo

Pen

M. 筆 pi^{3}
S. „ pih
C. „ patˏ

Pencil

M. 鉛筆 ch'ien^{1} pi^{3}
S. „ „ k'an pih
C. „ „ ˏyün patˏ

People

M. 人 jên^{2}; 百姓 po^{2} hsing
S. „ nyung; „ „ pak singˋ
C. „ ˏyan ; „ „ pákₒsingˋ

The common ——

M. 民人 min^{2} jên^{2}
S. 子民 ˇts ming
C. 人 „ ˏyan ˏman

Pepper

M. 胡椒麵兒 hu^{2} chiao mie(n)^{4} 'rh
S. „ „ 粉 'oo tsiau ˇfung
C. „ „ 末 ˏwú ˏtsíú mútˏ

Perhaps

M. 或 huo^{4}; 或者 huo^{4} chê^{3}
S. „ ˇok ; „ „ ˇok ˇtse ; 恐伯 ˇk'ong p'oˋ
C. „ wákˏ ; (2) wákˏ ˇche

—— he will not come

M. 他許不來 t'a^{1} hsü^{3} pu lai^{2}
S. 伊多半勿來 yi too penˋ 'veh le
C. 佢或者唔嚟 ˏk'ui wákˏ ˇche ˏm ˏlai

Photograph (noun)

M. 照的像 chao⁴ ti hsiang⁴
S. 小照 ˂siau tsau˃
C. 相 söng˃*

—— (vb.)

M. 照像 chao⁴ hsiang⁴
S. 拍小照 p'ak ˂siau tsau˃
C. 影相 ˂ying söng˃*

Pick

M. 摘 chai¹; 採 ts'ai³
S. (2) ˂ts'e
C. (1) chák˩

To —— up

M. 檢起來 chien³ ch'i lai
S. 拾 „ „ zih ˂chi le
C. 拈 „ 嚟 ˌním ˂héi ˩lai

To —— out

M. 揀 chien³; 挑 t'iao¹; 選 hsüan³
S. (1) ˂kan; (2) t'iau; (3) ˂sien
C. (1) ˂kán; (2) ˌt'iú

Picul

M. 担 (or 石) tan⁴
S. „ tan˃
C. „ tám˃

Piece

M. 塊 k'uai⁴
S. „ k'we˃
C. „ fái˃

A piece of wood

M. 一塊木頭 i² k'uai⁴ mu⁴-t'ou
S. „ „ „ „ ih k'we˃ mok ˂deu
C. „ „ „ yat˩ fái˃ muk˩

Pier

M. 馬頭 ma³-t'ou
S. 碼 „ ˂mo deu
C. 馬 „ ˂má ˩t'aú*

Pig

M. 猪 chu¹
S. „ ts
C. „ ˌchü

Pillow

M. 枕頭 chên³-t'ou
S. „ „ tsung˃ deu
C. „ „ ˂cham ˩t'aú

Pilot

M. 引水人 yin³ shui³ jên²; 領船的 ling³ ch'uan² ti
S. (1) ˂yung ˂s nyung; 領江个 ˂ling kaung kuh
C. 帶水人 tái˃ ˂shui ˩yan

Pin

M. 釘子針 ting¹-tzŭ chên¹
S. 洋針 yang tsung
C. 大頭針 tái² ˩t'aú ˌcham

Pincers

M. 鉗子 ch'ien²-tzŭ
S. „ jien
C. „ ˩k'ím

Pine (tree)

M. 松樹 sung[1] shu[4]
S. „ „ song zu[2]
C. „ „ ˏts'ung shü[2]

Pipe

M. (tobacco) 烟袋 yen[1] tai[4];
(stove) „ 筒 yen[1] t'ung
S. (tobacco) „ „ ien dong;
(stove) „ 通 ien t'ong
C. (tobacco and stove) 烟筒 ₒyín ˏt'ung*

Pistol

M. 手鎗 shou[3] ch'iang[1]
S. „ „ ˈseu ts'iang
C. „ „ ˈshaú ₒts'öng

Place

M. 地方 ti[4] fang
S. „ „ di[2] faung
C. „ „ téi[2] ˏfong

Plan

M. 法子 fa[2]-tzŭ; 主意 chu[2]-i
S. (1) fah ˈts; (2) ˈtsu i[2]
C. (1) fát₀ ˈtsz

To devise a ——

M. 想法子 hsiang[3] fa[2]-tzŭ
S. „ „ „ ˈsiang fah ˈts
C. 設 „ ch'ít₀ fát₀

—— of a house

M. 房樣子 fang[2] yang[4]-tzŭ
S. „ „ „ vaung yang[2] ˈts
C. 屋嘅形圖 uk₂ ke[2] ˏying ˏt'ò

Plant (vb.)

M. 種 chung[4]
S. „ tsong[2]
C. „ chung[2]

—— (noun)

M. 花草 hua[1] ts'ao[3]
S. „ „ hwo ˈts'au
C. 草木 ˈts'ò muk₂

Plate

M. 盤子 p'an[2]-tzŭ; 碟子 tieh[2]-tzŭ
S. 盆 „ bung ˈts
C. 碟 típ₂

Play (vb.)

M. 玩 wan[2]; 玩耍 wan[2] shua[3]
S. 勃相 beh siang[2]
C. 頑 ˏwán*; 頑耍 ˏwán ˈshá

To —— cards

M. 鬪牌 tou[4] p'ai[2]
S. „ „ teu[2] ba
C. 打紙牌 ˈtá ˈchi ˏp'ái*

To —— music

M. 作樂 tso[4] yüeh[4]
S. „ „ tsoo[2] yak
C. „ „ tsok₀ ngok₂

Please

M. 請 ch'ing[3]
S. „ ˈts'ing
C. „ ˈtseng†

Please take a seat

M. 請坐 ch'ing^{3} tso^{4}
S. „ „ ᶜts'ing ᶜzoo
C. „ „ ᶜtseng† ᶜts'o†

As you ——

M. 隨便 sui^{2} pien^{4}
S. „ „ dzoe bien^{5}
C. „ 得你 ˌts'ui tak$_{5}$ ᶜnéi

He was very pleased

M. 他狠喜歡 t'a^{1} hên^{3} hsi^{3} huan
S. 伊極 „ „ yi juh ᶜhyi hwen
C. 佢見好 „ 喜 ᶜk'ui kín^{5} ᶜhò ˌfún ᶜhéi

Plenty

M. 多 to^{1}; 豐足 fêng^{1} tsu^{2}
S. „ too; „ „ fong tsok
C. (2) ˌfung tsuk$_{5}$; 豐盛 ˌfung shing^{2}

Plough (noun)

M. 耕地犁 kêng^{1} ti^{4} li^{2}
S. 犁 li
C. „ ˌlai

Plunder (vb.)

M. 搶 ch'iang^{3}; 搶奪 ch'iang^{3} tò^{2}
S. (1) ᶜts'iang; (2) ᶜts'iang doeh
C. (1) ᶜts'öng; 搶劫 ᶜts'öng kíp$_{5}$

Pocket

M. 兜子 tou^{1}-tzŭ; 口袋 k'ou^{3} tai^{4}
S. 衣裳袋 i zaung de^{5}; 衣兜 i teu
C. 袋 toi^{2}*

Point

M. 尖兒 chie(n)^{1}-'rh
S. „ 頭 tsien deu; 點 ᶜtien
C. „ 處 ˌtsím ch'ü^{5}

Poison

M. 毒藥 tu^{2} yao^{4}
S. „ „ dok yak
C. „ „ tuk$_{2}$ yök$_{2}$

Pole

M. 杆子 kan^{1} tzŭ
S. 竿 koen; 棒 ᶜbaung
C. „ ˌkon; 杠 kong^{5}

A carrying ——

M. 扁担 pien^{3} tan
S. „ „ ᶜpien tan^{5}
C. 擔竿 tám^{5} ˌkon

To carry on a ——

M. 檯槓 t'ai^{2} kang^{4}
S. „ „ de kaung
C. 擔 ˌtám

To —— a boat

M. 撐船 ch'êng^{1} ch'uan^{2}
S. „ „ ts'ang zen
C. „ „ ˌch'áng ˌshün

Pony

M. 馬 ma³
S. „ ʿmo
C. (小) 馬 (ʿsíú) ⸢má

Pool

M. 水坑 shui³ kʻêng¹; 池子 chʻih² tzŭ
S. 池 dz
C. „ ⸢chʻī

Poor

M. 窮 chʻiung²; 貧窮 pʻin² chʻiung²
S. (1) jong; (2) bing jong
C. (1) ⸢kʻung; (2) ⸢pʻan ⸢kʻung

Pork

M. 猪肉 chu¹ jou
S. „ „ ts nyok
C. „ „ ⸢chü yuk₂

Port

M. 海口 hai³ kʻou³
S. „ „ ʿhe ʿkʻeu
C. „ „ ʿhoi ʿhaú

Treaty ——

M. 通商口岸 tʻung¹ shang¹ kʻou³ an⁴
S. „ „ „ „ tʻong saung ʿkʻeu ngoen²
C. „ „ „ „ ⸢tʻung ⸢shöng ʿhaú ngon²

Possess

M. 有 yu³
S. „ ʿyeu
C. „ ⸢yaú

Possible

M. 可行的 kʻo³ hsing² ti
S. 能彀个 nung keu² kuh
C. 可以做得 ʿho ⸢yí tsò² tak₂

—— to do

M. 做得來 tso⁴ tê lai²
S. „ „ „ tsoo² tuh le
C. „ „ 嚟 tsò² tak₂ ⸢lai

Post-office

M. 書信舘 shu¹ hsin⁴ kuan³
S. „ „ „ su sing² ʿkwen
C. „ „ „ ⸢shü sun² ʿkwún

The Chinese ——

M. 郵政局 yu² chêng chü²
S. „ „ „ yeu tsung² jok
C. „ „ „ ⸢yaú ching² kuk₂

Potato

M. 山藥頭 shan¹ yao tʻou²
S. „ 芋 san yui
C 薯仔 ⸢shü ʿtsai

Pour

M. 倒 tao⁴
S. „ ʿtau
C. „ ʿtò

To —— out

M. 倒出來 tao⁴ chʻu lai
S. „ „ „ ʿtau tsʻeh le
C „ „ 嚟 ʿtò chʻut₂ ⸢lai

Powder

M. 麵 mien[4]; 粉 fên[3]
S. (2) ʿfung
C. (2) ʿfan

Gun ——

M. 火藥 huo[3] yao[4]
S. „ „ ʿhoo yak
C. „ „ ʿfo yök$_2$

Practice

M. 規矩 kuei[1] chü
S. „ „ kwe ʿkyui
C. „ „ ˌkʿwai ʿkui

Practise

M. 學習 hsüeh[2] hsi[2]; 演習 yên[3] hsi
S. „ „ ʿauh dzih; 練習 lien' dzih
C. (1) hok$_2$ tsáp$_2$; (2) ʿyín tsáp$_2$

Praise

M. 說好 shuo[1] hao[3]; 誇 kʿua[1]; 誇獎 kʿua[1] chiang
S. (1) soeh ʿhau; 稱讚 tsʿung tsan'
C. (2) ˌkʿwá; (3) ˌkʿwá ʿtsöng

Prefer

M. 寧願 ning[2] yüan[4]
S. 情 „ 要 dzing nyoen' iau'; 喜歡 ʿhyi hwen
C. 寧願 ˌning yün[2]*

What do you prefer?

M. 你喜歡甚麼 ni[3] hsi[3] huan shê(n)[2]-mo
S. 儂歡喜啥 nong' hwen ʿhyi sa'
C. 你中意邊....更多呢 ʿnéi ˌchung yi' ˌpín.... kang' ˌto ˌni

Prepare

M. 預備 yü[4] pei
S. „ „ yui' be'
C. „ „ yü[2] péi[2]

President of the Republic

M. 大總統 ta[4] tsung[3] tʿung[3]
S. „ „ „ doo' ʿtsong ʿtʿong
C. „ „ „ tái[2] ʿtsung ʿtʿung

Pretend

M. 假粧 chia[3] chuang[1]
S. „ „ ʿka tsaung
C. 詐 chá'

—— not to know

M. 粧不知道 chuang[1] pu chih[1] tao[4]
S. „ 勿曉得 tsaung 'veh ʿhyau tuh
C. 詐作唔識 chá' tsok$_5$ ˌm shik$_2$

Pretty

M. 好看 hao[3] kʿan[4]
S. „ „ ʿhau kʿoen'
C. „ 睇 ʿhò ʿtʿai

Price

M. 價錢 chia⁴ ch'ien
S. „ „ ka' dien
C. „ „ ká' ˌts'ín

Market ——

M. 市價 shih⁴ chia⁴
S. „ „ ʿz ka'
C. „ „ ˌshí ká'

High ——

M. 大價錢 ta⁴ chia⁴ ch'ien
S. „ „ „ doo' ka' dien
C. 高 „ ˌkò ká'

What is the —— ?

M. 多少錢 to¹ shao³ ch'ien²
S. 啥價 „ sa' ka' dien
C. 價錢幾多呢 ka' ˌts'ín ʿkéi ˌto ˌni

Prickly heat

M. 痱子 fei⁴-tzŭ
S. „ „ be' ʿts
C. 熱痱 yít₂ fai'*

Prison

M. 監 chien¹; 監牢 chien¹ lao²
S. (1) kan; (2) kan lau
C. (1) ˌkám; (2) ˌkám ˌlò

To put in ——

M. 囚起來 ch'iu² ch'i³ lai²
S. 收監 seu kan
C. 禁(入)監內 kam' (yap₂) ˌkám noi²

To break prison

M. 逃監 t'ao² chien¹
S. „ „ dau kan
C. „ „ ˌt'ò ˌkám

Private

M. 私 ssŭ¹
S. „ s
C. „ ˌsz

—— affairs

M. 私事 ssŭ¹ shih⁴
S. „ „ s z'
C. „ „ ˌsz sz²

—— secretary

M. 幕友 mu⁴ yu³; 秘書 pi⁴ shu¹
S. (1) moo' ʿyeu; (2) pi' su
C. (1) mok₂ ˌyaú; (2) péi' ˌshü

Proceed

M. 往前去 wang³ ch'ien² ch'ü⁴
S. 出發 ts'eh fah; 向前去 hyang' zien chi'
C. 前進 ˌts'ín tsun'

—— from

M. 出於 ch'u¹ yü; 生出來 shêng¹ ch'u lai
S. (1) ts'eh yui; (2) sang ts'e le
C. 發出來 fát₀ chut, ˌloi

Promise

M. 應許 ying[1] hsü
S. „ „ iung' ʿhyui
C. „ 承 ˌying ˌshing

To break one's ——

M. 失信 shih[1] hsin[4]
S. „ „ seh sing'
C. „ „ shatˌ sun'

Pronunciation

M. 口音 kʿou[3] yin
S. „ „ ʿkʿeu iung
C. „ „ ʿhaú ˌyam

Proof

M. 憑據 pʿing[2] chü; 憑證 pʿing[2] chêng[4]
S. (1) bing kyui'; (2) bing tsung'
C. (1) ˌpʿang kui'

Province

M. 省 shêng[3]
S. „ ʿsang
C. „ ʿsháng

Public

M. 公 kung[1]; 國家的 kuo[2] chia[1] ti
S. „ kong; „ „ 个 kok kya kuh
C. „ ˌkung

The ——

M. 衆人 chung[4] jên[2]
S. „ „ tsong' nyung
C. 公衆 ˌkung chung'

Pull

M. 拉 la[1]
S. „ ʿla; 撵 chien'
C. „ ˌlai

To —— down a house

M. 拆房子 chʿai[1] fang[2]-tzŭ
S. „ „ „ tsʿak vaung ʿts
C. „ 屋 chʿákˌ ukˌ

To —— out of the water

M. 撈出水來 lao[1] chʿu[1] shui[3] lai[2]
S. „ „ „ „ liau tsʿeh ʿs le
C. 由水搵出嚟 ˌyaú ʿshui ˌmang chʿutˌ ˌlai

To —— out a nail

M. 拔釘子 pa[2] ting[1]-tzŭ
S. „ „ bah ting
C. „ „ patˌ ˌteng†

Pumelo

M. 柚子 yu[4]-tzŭ
S. „ „ yeu ʿts; 文旦 vung tan'
C. 波棣 ˌpo lukˌ

Pump

M. 擠 (*or* 抽) 水筒 chi[3] (*or* chʿou[1]) shui[3] tʿung[3]
S. 抽水筒 ʿtsʿeu ʿs dong
C. „ „ 器 ˌchʿaú ʿshui héi'; 欶筒 shokˌ ˌtʿung*

Punish

M. 責罰 tsê² fa; 治罪 chih⁴ tsui⁴

S. (1) tsak vah; (2) dz' ᶜdzoe

C. (1) chák₀ fat₂; 罰 fat₂

Pursue

M. 追 chui¹

S. „ tsoe

C. „ ₍chui

To —— closely

M. 趕緊 kan³ chin³

S. 追急 tsoe kyih

C. 趕緊 ᶜkon ᶜkan

Push

M. 推 t'ui¹

S. „ t'e

C. ₍t'ui

Put

M. 擱 ko¹; 放 fang⁴

S. „ kauh; „ faung'

C. 放 fong'; 擠 ₍chai

To —— down

M. 放下 fang⁴ hsia

S. „ „ faung' ᶜᶜau

C. „ 落 fong' lok₂; 擠落 ₍chai lok₂

To —— on a hat

M. 戴帽子 tai⁴ mao⁴-tzŭ

S. „ „ „ ta' mau' ᶜts

C. „ „ tái' mò²*

Quarter

M. 四分之一 ssŭ⁴ fên¹ chih i¹

S. „ „ „ „ s' vung' ts ih

C. „ „ „ „ sz' fan² ₍chí yat₅

A —— of an hour

M. 一刻 i¹ k'o⁴

S. „ „ ih k'uh

C. „ 喈鐘 yat₅ kwat₅ ₀chung

To give ——

M. 赦命 shê⁴ ming⁴

S. „ „ so' ming'

C. „ „ she' ming²

Quick

M. 快 k'uai⁴

S. „ kw'a'

C. „ fái'

Quiet

M. 平安 p'ing² an¹; 安靜 an¹ ching⁴

S. (1) bing oen; (2) oen ᶜzing

C. (1) ₍p'ing ₍on; 安 ₍on

The town is ——

M. 城裏平安 ch'êng² li³ p'ing² an¹

S. „ „ 安靜 dzung ᶜli oen ᶜzing

C. „ „ 平安 ₍sheng† ᶜlui ₍p'ing ₍on

Be quiet

M. 別說話 pieh² shuo¹ hua⁴; 安靜點兒 an¹ ching⁴ tie(n)-'rh³

S. 勿要響 'veh iau˃ ˁhyang; 靜拉 ˁzing la˃

C. 咪嘈 ˁmai ˧ts'ò

Radicals (in characters)

M. 字部 tzŭ⁴ pu⁴; 部首 pu⁴ shou³

S. (1) z˃ ˁboo; (2) ˁboo ˁseu

C. (1) tsz² pò²*

Raft

M. 筏子 fa²-tzŭ; 木排 mu⁴ p'ai²

S. (2) mok ba

C. (2) muk₂ ˧p'ái

Rails

M. 鐵軌 t'ieh³ kuei³

S. „ „ t'ih ˁkwe

C. „ „ t'ít₀ ˁkwai

Railway

M. 鐵路 t'ieh³ lu⁴

S. „ „ t'ih loo˃

C. „ „ t'ít₀ lò²; 火車路 ˁfo ˍch'e lò²

—— **station**

M. 火車站 huo³ ch'ê¹ chan⁴

S. „ „ „ ˁhoo ts'o dzan˃

C. „ „ „ 頭 ˁfo ˍch'e chám² ˧t'aú

Rain

M. 雨 yü³

S. „ ˁyui

C. „ ˧yü

Heavy ——

M. 大雨 ta⁴ yü³

S. „ „ doo˃ ˁyui

C. „ „ tái² ˧yü

It is raining

M. 下雨 hsia⁴ yü³

S. 落 „ lauh ˁyui

C. „ „ 咯 lok₂ ˧yü lo^{k}₀

Rank

M. 品級 p'in³ chi; 等 têng³

S. (1) ˁp'ing kyuh; (2) ˁtung

C. (1) ˁpan k'ap₃; (2) ˁtang

To form in ——

M. 擺陣 pai³ chên⁴

S. „ „ ba tsung

C. 排 „ ˧p'ái chan²

Rat

M. 老鼠 lao³ shu³

S. „ „ ˁlau ˁs (ˁt's); 老虫 ˁlau dzong

C. 老鼠 ˧lò ˁshü

Rations

M. 軍糧 chün¹ liang²

S. „ „ kyuin liang

C. „ „ ˁkwan ˧löng

Raw

M. 生 shêng[1]
S. „ sang
C. „ ˏsháng *

Razor

M. 剃頭刀 t'i[4] t'ou[2] tao[1]
S. „ „ „ t'i˒ deu tau
C. „ 刀 t'ai˒ ˏtò

Reach

M. 到 tao[4]
S. „ tau˒
C. „ tò˒

Unable to —— to

M. 構不着 kou[4] pu chao[2]
S. 撩勿 „ liau 'veh dzak
C. 唔搦得到 ˏm ˏò tak˳ tò˒

To —— out the hand

M. 伸手 shên[1] shou[3]
S. „ „ sung ᶜseu
C. „ „ ˏshan ᶜshaú

Read

M. 看 k'an[4]; 看書 k'an[4] shu[1]
S. (1) k'oen˒; (2) k'oen˒ su
C. 睇書 t'ai˒ ˏshü

To —— aloud

M. 念 nien[4]
S. „ nyan˒
C. 讀書 tuk˳ ˏshü

Ready

M. 預備好了 yü[4] pei hao[3] lo; 齊備了 ch'i[2] pei[4] lo
S. 預備好 yui˒ be˒ ᶜhau
C. 便 pín[2]

—— money

M. 現錢 hsien[4] ch'ien[2]
S. „ „ yien˒ dien
C. „ 銀 yín[2] ˏngan *

—— made

M. 現成的 hsien[4] ch'êng[2] ti
S. „ „ 个 yien˒ dzung kuh
C. „ „ 嘅 yín[2] ˏshing ke˒

Real (genuine)

M. 眞 chên[1]
S. „ tsung
C. „ ˏchan

—— (actual)

M. 實 shih[2]
S. „ zeh
C. „ shat˳

Rear (noun)

M. 後頭 hou[4] t'ou
S. „ „ ᶜ'eu deu
C. „ 邊 haú[2] pín[2]

In the ——

M. 在後頭 tsai[4] hou[4] t'ou
S. 拉 „ „ la˒ ᶜ'eu deu
C. 在 „ 頭 tsoi[2] haú[2] ˏt'aú

Rearguard

M. 後隊 hou⁴ tui⁴; 尾軍 wei³ chün¹

S. (1) ᶜ"eu deˀ

C. (1) haú² tui²

Rebel (noun)

M. 反叛 fan³ pʻan⁴; 賊 tsei²

S. „ „ ᶜfan benˀ; 逆賊 nyuh zuh

C. 作反嘅 tsok₀ ᶜfán keˀ; (2) tsʻak₂*

Rebellion

M. 反亂 fan³ luan⁴

S. „ „ ᶜfan loenˀ; 造反 ᶜzau ᶜfan

C. 叛 „ pún² lün²

Recent

M. 新近 hsin¹ chin⁴

S. „ „ sing ᶜjung

C. 近時 kan² ᶜshí

Recently arrived

M. 新來的 hsin¹ lai² ti

S. „ „ 个 sing le kuh

C. 近時來嘅 kan² ᶜshi ᶜloi keˀ

Recognize

M. 認識 jên⁴ shih

S. „ „ nyungˀ suh

C. „ ying²

Recruit

M. 新兵 hsin¹ ping¹

S. „ „ sing ping

C. „ „ ᶜsan ᶜping

Red

M. 紅 hung²

S. „ ᶜong

C. „ ᶜhung

Reed

M. 葦子 wei³-tzu

S. 蘆葦 loo we

C. „ 荻 ᶜlo tek₂

Refuse

M. 推辭 tʻui¹ tzʻŭ; 不肯 pu⁴ kʻên³

S. (1) tʻeˀ dz; 勿肯 ʼveh ᶜkʻung

C. (1) ᶜtʻui ᶜtsʻz; (2) patₒ ᶜhang

Regiment

M. 一隊兵營 i¹ tui⁴ ping¹; ying²

S. (1) ih deˀ ping; (2) yung

C. (1) yatₒ tui² ᶜping; (2) ᶜying

Regret

M. 後悔 hou⁴ hui³; 可惜 kʻo³ hsi¹

S. (1) ᶜ"eu hwe; (2) ᶜkʻau sih

C. (2) ᶜho sikₒ

Regulation

M. 章程 chang¹ chʻêng

S. „ „ tsang dzung

C. „ „ ᶜchöng ᶜchʻing

Reins

M. 扯手 ch'ê² shou

S. 韁繩 kyang zung

C. 馬韁 ᶜmá ˌköng

Release

M. 放 fang⁴; 釋放 shih⁴ fang⁴

S. (1) faung⁾; (2) suh faung⁾

C. (1) fong⁾; (2) shik¸ fong⁾

Religion

M. 教 chiao⁴

S. „ kyau⁾

C. „ káú⁾

The Buddhist ——

M. 佛教 fo² chiao⁴

S. „ „ veh kyau⁾

C. „ „ fat¸ káú⁾

The Protestant ——

M. 耶穌教 yeh³ su¹ chiao⁴

S. „ „ „ ya soo kyau⁾

C. „ „ „ ˌye ˌsò káú⁾

The Roman Catholic ——

M. 天主教 t'ien¹ chu³ chiao⁴

S. „ „ „ t'ien ᶜtsu kyau⁾

C. „ „ „ ˌt'ín ᶜchü káú⁾

Remain (stay)

M. 住 chu⁴

S. „ dzu⁾

C. „ chü²

Remain (over)

M. 剩下 shêng⁴ hsia

S. „ „ dzung⁾ ᶜᶜau

C. „ „ shing² há²

Only a few ——

M. 剩的不多 shêng⁴ ti pu to¹

S. „ 得勿 „ dzung⁾ tuh 'veh doo⁾

C. 不過有些少剩倒 pat¸ kwo⁾ ᶜyaú ˌse ᶜshíú shing² ᶜtò

Remember

M. 記得 chi⁴ tê

S. „ „ kyi⁾ tuh

C. „ „ kéi⁾ tak¸

I can't ——

M. 我想不起來 wo³ hsiang³ pu ch'i lai²

S. 我想勿起來 ᶜngoo ᶜsiang 'veh ᶜchi le

C. 記唔起嚟 kéi⁾ ˌm ᶜhéi ˌlai

Remove

M. 去 ch'ü⁴

S. 除去 dzu chi⁾; 移動 yí ᶜdong

C. 搬 ˌpún

To —— a difficulty

M. 除難 ch'u² nan²

S. „ „ dzu nan

C. „ „ ˌch'ui ˌnán

To remove to another house

M. 搬家 pan[1] chia[1]
S. „ „ pen kya
C. „ 屋 ˌpún uk˩

Rent (vb.)

M. 租 tsu[1]; 賃 lin[4]
S. „ tsoo; 借 tsʻia
C. „ ˌtsò; (2) yam[2]

To —— a house

M. 賃房子 lin[4] fang[2]-tzŭ
S. 租 „ „ tsoo vaung-ʻts
C. „ 間屋 ˌtsò ˌkán uk˩

—— (noun)

M. 租錢 tsu[1] chʻien
S. „ „ tsoo dien
C. „ 銀 ˌtsò ˍngan*

Repeat

M. 再說 tsai[4] shuo[1]
S. „ 話 tse˃ wo˃
C. „ 講 tsoi˃ ʻkong

Reply

M. 答應 ta[2] ying[4]; 回答 hui[2] ta[2]
S. (1) tah iung˃; (2) we teh
C. 答 táp˳

—— **to a letter**

M. 回信 hui[2] hsin[4]
S. „ „ we sing
C. „ „ ˍwúi sun˃

Report (vb.)

M. 報 pao[4]; 告訴 kao[4] su[4]
S. „ 告 pau˃ kau˃; (2) kau˃ soo˃
C. „ pò˃

To —— to a superior

M. 稟 ping[3]; 詳報 hsiang[2] pao[4]
S. (1) ʻping; 申報 sung pau˃
C. (1) ʻpan

—— **(written statement)**

M. 報單 pao[4] tan[1]
S. „ „ pau˃ tan
C. „ 之章呈 pò˃ ˌchí ˌchöng ˍchʻing; (1) pò˃ ˳tán

—— **(rumour)**

M. 風聞 fêng[1] wên[2]
S. „ „ fong vung
C. 謠言 ˍyíú ˍyin; 風聲 ˌfung ˌshing

—— **of a gun**

M. 鎗聲 chʻiang[1] shêng[1]
S. „ „ tsʻiang sung
C. „ 响 ˳tsʻöng ʻhöng

Rescue

M. 救 chiu[4]
S. „ kyeu˃
C. „ kaú˃

Resign

M. 辭 tzʻŭ[2]
S. „ dz
C. „ 職 ˍtsʻz chik˩

To resign office

M. 辭官 tz'ŭ[2] kuan[1]

S. „ „ dz kwen; 辭職 dz tsuh

C. „ „ ˌts'z ˌkwún

To —— on account of illness

M. 告病 kao[4] ping[1]

S. „ „ kau' bing'

C. 因病辭職 ˌyan peng[2]† ˌts'z chikˌ

Resolute

M. 有志氣 yu[3] chih[4] ch'i; 堅心 chien[1] hsin[1]

S. (1) ˋyeu ts' chi'; (2) kyien sing

C. (2) ˌkín ˌsam

Rest (vb.)

M. 歇 hsieh[1]

S. „ hyih

C. „ hítˌ

To take a little ——

M. 歇一歇兒 hsieh[1] i[1] hsieh[1] 'rh

S. „ „ „ hyih ih hyih

C. „ „ „ hítˌ yatˌ hítˌ

Retreat

M. 退 t'ui[4]; 往後退 wang[3] hou[4] t'ui[4]

S. (1) t'e'; 向後退 hyang' ˋeu t'e'

C. (1) t'ui'

To sound the retreat

M. 吹退號 ch'ui[1] t'ui[4] hao[4]

S. „ „ „ ts' t'e' 'au'

C. „ „ „ ˌch'ui t'ui' hò[2]

Return

M. 回來 hui[2] lai; 回去 hu[2] ch'ü

S. (1) we le; (2) we chi'

C. 翻嚟 ˌfán ˌlai

To —— home

M. 回家 hui[2] chia[1]

S. „ „ we kya

C. „ „ ˌwúi ˌká

Unable to ——

M. 回不來 hui[2] pu lai[2]

S. 勿能回來 'veh nung we le

C. 唔翻得嚟 ˌm ˌfán ták, ˌlai

To —— a visit

M. 回拜 hui[2] pai[4]

S. „ „ we pa'

C. „ „ ˌwúi pái'

Revolver

M. 手鎗 shou[3] ch'iang[1]

S. „ „ ˋseu ts'iang

C. 對面笑 tui' mín[2] síú'

Reward

M. 賞 shang[3]; 賞賜 shang[3] tz'ŭ[4]

S. (1) ˋsaung; (2) ˋsaung s'

C. (1) ˋshöng; (2) ˋshöng ts'z'

Rheumatism

M. 風濕 fêng[1] shih[1]
S. „ „ fong seh
C. „ „ ˌfung shapˎ

Rib

M. 肋條 lei[4] t'iao; 肋骨 lei[4] ku[3]
S. (1) luh diau; (2) luh kweh
C. 肋 lakˍ; 肋索骨 lakˍ shákₒ kwatˎ

Rice

M. 米 mi[3]; 大米 ta[4] mi[3]
S. „ ˈmi
C. „ ˈmai; (growing) 禾 ˌwo; (unhulled) 穀 kukˎ

To grow ——

M. 種稻子 chung[4] tao[4]-tzŭ
S. „ „ 'tsongˀ ˈdau
C. „ 禾米 chungˀ ˌwo ˈmai

Boiled ——

M. 飯 fan[4]
S. „ vanˀ
C. „ fán[2]

—— fields

M. 稻子田 tao[4]-tzŭ t'ien[2]
S. „ 田 dauˀ dien
C. 禾 „ ˌwo ˌt'ín

Rich

M. 富 fu[4]
S. „ fooˀ
C. „ fúˀ

A rich man

M. 財主 ts'ai[2] chu
S. „ „ dze ˈtsu
C. „ „ ˌts'oi ˈchü

To become ——

M. 發財 fa[1] ts'ai[2]
S. „ „ fah dze
C. „ „ fátₒ ˌts'oi

Ride

M. 騎 ch'i[2]
S. „ ji
C. „ ˌk'é; 坐 ˊts'o†

Rifle

M. 來復鎗 lai[2] fu ch'iang[1]
S. „ „ „ le foh ts'iang
C. „ „ „ ˌloi fukˍ ₒts'öng

Right (correct)

M. 正 chêng[4]; 不錯 pu[4] ts'o[4]
S. „ tsungˀ; 勿 „ 'vehˀ ts'o
C. „ chingˀ; 着 chokˍ; 啱 ˌngám; 冇錯 ˊmò ts'oˀ

The —— road

M 正道 chêng[4] tao[4]
S. „ 路 tsungˀ looˀ
C. „ „ chingˀ lòˀ

He is in the ——

M. 他有理 t'a[1] yu li[3]
S. 伊是對个 yi ˈz teˀ kuh
C. 佢係合道理 ˊk'ui haiˀ hopˍ tòˀ ˊléi

Right (hand)

M. 右 yu⁴
S. „ yeu⁵
C. „ (手) yaú² (ᶜshaú)

On the ——

M. 在右邊 tsai yu⁴ pien
S. „ „ „ ᶜdze yeu⁵ pien
C. „ „ „ tsoi² yaú² pín²

Ripe

M. 熟 shou²
S. „ zok
C. „ shuk₂

Rise

M. 起來 ch'i³ lai
S. „ „ ᶜchi le
C. „ 嚟 ᶜhéi ˌlaí

To —— early

M. 起來的早 ch'i³ lai ti tsao³
S. „ „ 得 „ chi le tuh ᶜtsau
C. 清早起嚟 ˌts'ing ᶜtsò ᶜhéi ˌlai

The sun has risen

M. 太陽上來了 t'ai⁴ yang shang⁴ lai lo
S. 太陽出來哉 t'a⁵ yang ts'eh le tse
C. 日頭已經昇咯 yat₂ ˌt'aú* ᶜyí ˌking ˌshing lokₒ

The wind is rising

M. 颳起風來了 kua¹ ch'i fêng¹ lai lo
S. 發起風來哉 fah ᶜchi fong le tse
C. 風起緊嚟 ˌfung ᶜhéi ᶜkan ˌlai

River

M. 河 ho²; 江 chiang¹
S. „ 'oo; „ kaung
C. „ ˌho; „ ˌkong

Road

M. 道 tao⁴; 路 lu⁴
S. „ dau⁵; „ loo⁵
C. (2) lò²

To take the shortest ——

M. 走近道兒 tsou³ chin⁴ tao 'rh
S. „ „ 路 ᶜtseu ᶜjung loo⁵
C. 行至短路 ˌhang chí⁵ ᶜtün lò²

The —— is bad

M. 道兒不好走 tao⁴ 'rh pu hao³ tsou³
S. 路勿好走 loo⁵ 'veh ᶜhau ᶜtseu
C. 個條路唔好 ko⁵ ˌt'íú lò² ˌm ᶜhò

Cross-roads

M. 十字路 shih² tzŭ⁴ lu⁴
S. „ „ „ zeh z⁵ loo⁵
C. „ „ „ shap₂ tsz² lò²

Roast

M. 燒 shao[1]; 烤 k'ao[3]
S. „ sau; „ ᶜk'au
C. „ ᶜshíú

Robber

M. 賊 tsei[2]; 强盜 ch'iang[2] tao[4]
S. „ zuh; (2) ᶜjang dauˀ
C. „ ts'ák$_2$*

Rock

M. 石頭 shih[2]-t'ou; 山石 shan[1] shih[2]
S. (1) zak deu; (2) san zak
C. 欖石 ᶜp'ún shek$_2$†

Roof

M. 房頂 fang[2] ting[3]
S. 屋 „ ok ᶜting
C. „ 背 uk$_5$ puiˀ; 瓦面 ᶜngá mín[2]*

Room

M. 屋子 wu[1]-tzŭ
S. „ ok; 房 vaung
C. 房 ᶜfong*

A ——

M. 一間屋子 i[1] chien[1] wu[1]-tzŭ
S. „ „ „ ih kan ok
C. „ „ 房 yat$_5$ ᶜkán ᶜfong*

Bedroom

M. 睡覺的屋子 shui[4] chiao[4] ti wu[1] tzŭ; 臥房 wo[4] fang[2]
S. (2) ngooˀ vaung
C. 房 ᶜfong*; 瞌訓房 fanˀ ᶜfong*

Root

M. 根子 kên[1]-tzŭ; 根本 kên[1] pên[3]
S. 根 kung; (2) kung ᶜpung
C. „ ᶜkan; (2) ᶜkan ᶜpún

To —— out

M. 拔 pa[2]
S. „ bah
C. „ pat$_2$

Rope

M. 繩子 shêng[2]-tzŭ
S. „ zung
C. 纜 lám[2]

Rotten

M. 爛 lan[4]; 壞 huai[4]
S. „ lanˀ; „ waˀ
C. 霉爛 ᶜmúi lán[2]

Rough (uneven)

M. 不平 pu[4] p'ing[2]; (coarse) 粗 ts'u[1]
S. 勿平 'veh bing; (2) ts'oo
C. (1) pat$_5$ ᶜp'ing; (2) ᶜts'ò

The sea is rough

M. 海浪大 hai³ lang² ta⁴
S. „ „ „ 'he laung' doo'
C. „ „ „ ᶜhoi long² tái²

Round

M. 圓 yüan²
S. „ yoen
C. „ ₍yün

All ——

M. 周圍 chou¹ wei²
S. „ „ tseu we
C. „ „ ₍chaú ₍wai

Row (vb.)

—— a boat

M. 搖船 yao² ch'uan²
S. „ „ yau zen
C. 櫂 cháú²

—— (noun)

M. 行 hang²; 溜 liu⁴
S. „ 'aung; 排 ba; 埭 da'
C. „ ₍hong; 刺 lát₂

A —— of trees

M. 一行樹 i¹ hang² shu⁴
S. „ „ „ ih 'aung zu'
C. „ „ „ yat₅ ₍hong shü²

Rub

M. 擦 ts'a¹; 磨 mo²
S. „ ts'ah; „ moo
C. „ ts'át₀

Rudder

M. 船舵 ch'uan² to⁴
S. „ „ zen ᶜdoo
C. „ 艚 ₍shün ᶜt'ái

Ruins

A house in ——

M. 破房 p'o⁴ fang²
S. „ „ p'oo' vaung
C. 傾倒嘅屋 ₍k'ing ᶜtò ke' uk₅

A city in ——

M. 毀敗的城 hui³ pai⁴ ti ch'êng²
S. 敗壞个 „ ba' wa' kuh dzung
C. 蹂躪嘅 „ ᶜyaú ₍lán ke' ₍sheng†

Run

M. 跑 p'ao³
S. „ bau
C. 走 ᶜtsaú

Unable to ——

M. 跑不動 p'ao³ pu tung⁴
S. „ 勿 „ bau 'veh ᶜdong
C. 唔走得 ₍m ᶜtsaú tak₅

To —— away

M. 逃跑 t'ao² p'ao³
S. „ „ dau bau
C. 走去 ᶜtsaú hui'; 踢 tek₀†

Rush

M. 闖 ch'uang^{4}

S. „ ts'aung^{5}; 衝 ts'ong

C. „ ^{c}ch'ong; 冲突 $_{c}$ch'ung tat$_{2}$

To —— forward

M. 往前闖 wang^{3} ch'ien^{2} ch'uang^{4}

S. 向 „ 衝 hyang^{5} zien ts'ong

C. 闖前 ^{c}ch'ong $_{z}$ts'ín

To —— in

M. 闖進 ch'uang^{4} chin^{4}

S. 衝 „ 去 ts'ong tsing^{5} chi^{5}

C. 闖 „ ^{c}ch'ong tsun^{5}

Russia

M. 俄國 o^{4} kuo

S. „ „ ngoo kok

C. „ „ ngo^{2} kwok$_{o}$

Rut

M. 車轍 ch'ê^{1} chê^{2}; 車印兒 ch'ê^{1} yi(n)^{4} 'rh

S. 車跡 ts'o tsih; 車印子 ts'o iung^{5}-^{c}ts

C. (1) $_{c}$ch'e ch'ít$_{o}$

Sack

M. 口袋 k'ou^{3} tai^{4}

S. 袋 de^{5}

C. „ toi^{2}*

Sad

M. 憂愁 yu^{1} ch'ou; 憂悶 yu^{1} mên^{4}

S. (1) ieu dzeu; (2) ieu mung^{5}

C. (1) $_{c}$yaú $_{z}$shaú; 閉翳 pai^{2} ai^{5}

Saddle

M. 鞍子 an^{1}-tzŭ

S. „ „ oen ^{c}ts

C. 馬鞍 ^{c}má $_{c}$on

To —— a horse

M. 鞁馬 pei^{4} ma^{3}

S. 裝 „ tsaung ^{c}mo

C. 以鞍配馬 ^{c}yí $_{c}$on p'ui^{5} ^{c}ma

Safe

M. 妥當 t'o^{3} tang; 穩當 wên^{3} tang

S. (1) ^{c}t'oo taung^{5}; (2) ^{c}'wung taung^{5}

C. (1) ^{c}t'o tong^{5}

Sailor

M. 水手 shui^{3} shou^{3}

S. „ „ ^{c}s ^{c}seu

C. „ „ ^{c}shui ^{c}shaú

Sails

M. 船篷 ch'uan^{2} p'êng^{2}; 帆 fan^{1}

S. (1) zen bong

C. 艓 ^{c}lé̍i

To hoist sail

M. 拉起篷來 la¹ ch'i p'êng² lai; 扯篷 ch'ê³ p'êng²

S. (1) 'la ᶜchi bong le; (2) ᶜts'a bong

C. 扯(高 *or* 起 *or* 上)哩 ᶜch'e (ˌkò *or* ᶜhéi *or* ᶜshöng) ᶜléi

To take in ——

M. 落篷 lo⁴ p'êng²

S. „ „ lauh bong

C. „ 哩 lokˌ ᶜléi

Sale

M. 賣 mai⁴

S. „ maˀ

C. 出賣 ch'utˌ máiˀ

To have for ——

M. 發賣 fa¹ mai⁴

S. „ „ fah maˀ

C. „ „ fátˌ maiˀ

Salt

M. 鹽 yen²

S. „ yien

C. „ ˌyím

—— fish

M. 鹹魚 hsien² yü²

S. „ „ 'an ng

C. „ „ ˌhám ˌyü*

Salute

M. 拜 pai⁴; 行禮 hsing² li³

S. „ paˀ; „ „ ᶜang ᶜli

C. „ páiˀ; „ „ ˌhang ᶜlai; 請安 ᶜts'ing ˌon

Same

M. 一樣的 i¹ yang⁴ ti; 相同 hsiang¹ t'ung²

S. 一樣 ih yangˀ; (2) siang dong

C. „ „ yatˌ yöngˀ

Of the —— age

M. 同年 t'ung² nien²

S. „ „ dong nyien

C. „ „ ˌt'ung ˌnín

From the —— place

M. 同鄉 t'ung² hsiang¹

S. „ „ dong hyang

C. „ „ ˌt'ung ˌhöng

Sand

M. 沙 sha¹

S. „ so

C. „ ˌshá

Sand-bank

M. 沙灘 sha¹ t'an¹

S. „ „ so t'an

C. „ „ ˌshá ᶜt'án

Saturday

M. 禮拜六 li³ pai⁴ liu⁴

S. „ „ „ ᶜli paˀ lok

C. „ „ „ ᶜlai páiˀ lukˌ

Saucepan

M. 鍋 kuo[1]; 盞子 ku[3]-tzŭ
S. „ koo; 鑵頭 kwen[3] deu
C. 煲 ˌpò

Save

M. 救 chiu[4]
S. „ kyeu[3]
C. „ kaú[3]

To —— life

M. 救命 chiu[4] ming[4]
S. „ „ kyeu[3] ming[3]
C. „ „ kaú[3] meng[2]†

To —— money

M. 省錢 shêng[3] ch'ien[2]
S. „ „ ˈsang dien
C. 慳 ˌhán

To —— time

M. 省工夫 sheng[3] kung[1] fu
S. „ „ „ ˈsang kong-foo
C. „ 時候 ˈsháng ˌshí haú[2]

To —— trouble

M. 省事 shêng[3] shih[4]
S. „ „ ˈsang z[3]
C. „ „ ˈsháng sz[2]

Saw (noun)

M. 鋸 chü[4]
S. „ 子 ka[3] ˈts
C. „ kui[3]

Say

M. 說 shuo[1]
S. 話 wo[3]
C. 講 ˈkong

To have nothing to ——

M. 沒有話說 mei[2] yu[3] hua[4] shuo[1]
S. 無啥 „ 頭 m sa[3] wo[3] deu
C. 冇野講 ˈmò ˈye ˈkong

Unable to —— for certain

M. 說不準 shuo[1] pu[4] chun[3]
S. „ 勿定 soeh 'veh ding[3]
C. 唔話得定 ˌm wá[2] tak, ˌting

Scales

M. 天平 t'ien[1] p'ing[2]; 秤 ch'êng[4]
S. (1) t'ien bing; (2) ts'ung[3]
C. (1) ˌt'ín ˌp'ing; (2) ch'ing[3]

Scatter

M. 散 san[4]; 撒 sa[3]
S. „ san[3]; „ sah; 散開 san[3] k'e
C. „ sán[3]; „ sátₒ

To —— in a fight

M. 打散了 ta[4] san[4] lo
S. „ „ ˈtang san[3]
C. 因打散咀 ˌyan ˈtá sán[3] ˈcho

To scatter in flight

M. 逃散了 t'ao^{2} san^{4} lo
S. „ „ dau san$^{\flat}$
C. „ 走散曉 ˌt'ò ʿtsau sán$^{\flat}$ ˌhíú

School

M. 學房 hsüeh^{2} fang^{2}
S. „ 堂 'auh daung
C. 書館 ˌshü ʿkwún

To go to ——

M. 上學 shang^{4} hsüeh^{2}
S. „ „ ʿzaung ʿauh
C. „ „ ˢshöng hok$_{2}$

—— boy

M. 學生 hsüeh^{2} shêng^{1}
S. „ „ 'auh sang
C. „ „ hok$_{2}$ ˌsháng†

—— master

M. 先生 hsien^{1} shêng^{1}; 教習 chiao^{4} hsi
S. (1) sien sang; 教師 kyau$^{\flat}$ s
C. (1) ˌsín ˌsháng†

Scissors

M. 剪子 chien^{3} tzŭ
S. „ 刀 ʿtsien tau
C. 鉸剪 káú$^{\flat}$ ʿtsín

Sea

M. 海 hai^{3}
S. „ ʿhe
C. „ ʿhoi

Seaside

M. 海邊 hai^{3} pien^{1}
S. „ „ ʿhe pien
C. „ „ ʿhoi ˌpín

—— going junks

M. 走海的船 tsou^{3} hai^{3} ti ch'uan^{2}
S. 海船 ʿhe zen
C. 出大海嘅船 ch'ut, tái^{2} ʿhoi ke$^{\flat}$ ˌshün

To put to ——

M. 出海 ch'u^{1} hai^{3}
S. „ 洋 ts'eh yang
C. „ 海 ch'ut, ʿhoi; 出大洋 ch'ut, tái^{2} ˌyöng

—— sick

M. 暈船 yün^{4} ch'uan^{2}
S. „ „ yuin$^{\flat}$ zen
C. „ 浪 wan^{2} long^{2}

Seal (noun)

M. 印 yin^{4}
S. „ iung$^{\flat}$
C. „ yan$^{\flat}$

—— (vb.)

M. 打印 ta^{3} yin
S. „ „ ʿtang iung$^{\flat}$
C. „ „ ʿtá yan$^{\flat}$

To —— up

M. 封 fêng^{1}
S. „ fong
C. „ ˌfung

Season

M. 季 chi⁴; 時令 shih² ling⁴
S. „ kyi⁾; „ „ z-ling⁾
C. „ kwai⁾; 天時 ˌt'in ˏshí

The four seasons

M. 四季 ssŭ⁴ chi⁴
S. „ „ s⁾ kyi⁾
C. „ „ sz⁾ kwai⁾

Second

M. 第二 ti⁴ êrh⁴
S. „ „ di nyi⁾
C. „ „ tai² yí²

Secret

M. 密 mi⁴; 機密 chi¹ mi⁴
S. 秘密 pi⁾ mih
C. (1) matˌ; (2) ˌkéi matˌ

—— society

M. 私會 ssŭ¹ hui⁴
S. „ „ s we⁾
C. „ „ ˌsz wúi²

In ——

M. 密密的 mi⁴ mi⁴ ti
S. 偷件子 t'eu ben⁾ ʿts
C. 私間 ˌsz ˌkán

A ——

M. 密事 mi⁴ shih⁴
S. 秘密事 pi⁾ mih z⁾
C. 密事 matˌ sz²

Secure

M. 妥當 t'o³ tang⁴; 安穩 an¹ wên³
S. (1) ʿt'oo taung⁾; (2) oen ʿwung
C. (1) ˏt'o tong⁾

See

M. 看見 k'an⁴ chien⁴
S. „ „ k'oen⁾ kyien⁾
C. 見 kín⁾

Unable to ——

M. 看不見 k'an⁴ pu⁴ chien⁴
S. „ 勿 „ k'oen⁾'veh kyien⁾
C. 唔見得 ˏm kín⁾ takˌ

Did you —— ?

M. 瞧見麼 ch'iao² chien⁴ mo
S. 看 „ 否 k'oen⁾ kyien⁾ va⁾
C. 你 „ 唔見呢 ˏnéi kín⁾ ˏm kín⁾ ˌni

To —— through (a plan)

M. 看破 k'an⁴ p'o⁴
S. „ „ k'oen⁾ p'oo⁾
C. „ „ hon⁾ p'o⁾

Seed

M. 種子 chung³ tzŭ
S. „ „ ʿtsong-ʿts; 種 ʿtsong
C. „ ʿchung

Seek

M. 找 chao³; 尋 hsün²
S. (2) zing
C. 搵 ʿwan

Seize

M. 拏 na²; 捉拏 cho¹ na²

S. (1) nau; (2) tsauh nau

C. 拉 ˏlái; 捉 chuk˳

To —— territory

M. 佔地 chan⁴ ti⁴

S. „ „ tsien˒ di˒

C. „ „ chím˒ téi

Self

M. 自己 tzŭ⁴ chi

S. „ 家 z˒ ka

C. „ 己 tsz² ˁkéi

Sell

M. 賣 mai⁴

S. „ ma˒

C. „ mái²

Unable to ——

M. 賣不了 mai⁴ pu liao³

S. „ 勿落 ma˒ 'veh lauh

C. 唔賣得 ˏm mái² tak˽

To —— by auction

M. 拍賣 p'ai¹ mai⁴

S. „ „ p'ak ma˒

C. 喊夜冷 hám˒ ye² ˳lán

Send

M. 打發去 ta³ fa ch'ü⁴; 發 fa¹

S. (1) ˁtang fah chi˒; 發出 fah ts'eh; 差 ts'a

C. 打發 ˁtá fat˳; 寄 kéi˒; 附 fú²

To send presents

M. 送禮 sung⁴ li³

S. „ „ song˒ ˁli

C. „ „ sung˒ ˁlai

To —— troops

M. 派兵 p'ai⁴ ping¹

S. „ „ p'a˒ ping

C. „ „ p'ái˒ ˏping

Sentence (noun)

M. 一句 i¹ chü⁴; 一句話 i¹ chü⁴ hua⁴

S. (1) ih kyui˒; (2) ih kyui˒ wo˒

C. (1) yat˽ kui˒; (2) yat˽ kui˒ wá²*

—— (vb.)

M. 定罪 ting⁴ tsui⁴

S. „ „ ding˒ ˁdzoe

C. 辦 pán²; 半斷 p'ún˒ tün˒

—— to death

M. 定死罪 ting⁴ ssŭ³ tsui⁴

S. „ „ „ ding˒ ˁsi ˁdzoe

C. „ „ „ ting² ˁsz tsui²

Sentry

M. 看守的兵 k'an⁴ shou³ ti ping¹

S. 守衛兵 ˁseu we˒ ping

C. 防兵 ˏfong ˏping; 哨兵 sháú˒ ˏping

Separate

M. 分開 fên[1] k'ai[1]
S. „ „ fung k'e
C. „ „ ˌfan ˌhoi

—— (intrans.)

M. 離開 li[2] k'ai[1]
S. „ „ li k'e
C. „ „ ˌléi ˌhoi

Separated by a river

M. 隔着一道河 ko[2] cho i[1] tao[4] ho[2]
S. 隔開一條河 kak k'e ih diau 'oo
C. 有條河隔開 ˇyaú ˌt'íú ˌho kákₒ ˌhoi

September

M. 九月 chiu[3] yüeh[4]
S. „ „ ˇkyeu nyoeh
C. 英九月 ˌying ˇkaú yütₒ

Serious

M. 重大 chung[4] ta[4]
S. „ „ ˇdzong daˀ
C. 關係 ˌkwán hai[2]

A —— matter

M. 大事 ta[4] shih[4]
S. „ „ daˀ zˀ
C. 重 „ chung[2] sz[2]; 重大之事 chung[2] tái[2] ˌchi sz[2]

A serious illness

M. 重病 chung[4] ping[4]
S. „ „ ˇdzong bingˀ
C. „ „ chung[2] peng[2]†

Servant

M. 使喚人 shih[3] huan jên[2]; 底下人 ti[3] hsia jên[2]; 跟班的 kên[1] pan[1]-ti
S. 用人 yongˀ nyung; 跟班 kung pan; (2) ˇti ˇ'au ˇnyung
C. (1) ˇshai fúnˀ ˌyan

Female ——

M. 丫頭 ya[1] t'ou[2]
S. „ „ au deu; 女用人 ˇnyui yongˀ nyung
C. 丫頭 ˌá ˌt'aú; 使媽 ˇshai ₒmá

Serve

M. 服侍 fu[2] shih; 伺候 tz'ŭ[4] hou
S. (1) vok zˀ; (2) ˇz 'euˀ
C. 服事 fukₒ sz[2]

To —— as a soldier

M. 當兵 tang[1] ping[1]
S. „ „ taungˀ ping
C. „ „ ˌtong ˌping

Settle

M. 定規 ting[4] kuei
S. „ „ dingˀ kwe
C „ ting[2]

To settle the price

M. 定價錢 ting⁴ chia⁴ ch'ien
S. „ „ „ ding⁷ ka⁷ dien
C. „ „ „ ting² ká⁷ ˏts'ín

—— (intrans.)

M. 落住 lo⁴ chu⁴
S. 定 „ ding⁷ dzu⁷
C. „ „ ting² chü²

Settlement (foreign)

M. 租界 tsu¹ chieh
S. „ „ tsoo ka⁷
C. „ „ ˏtsò kài⁷

Seven

M. 七 ch'i¹
S. „ ts'ih
C. „ ts'at˩

Sew

M. 縫 fêng²
S. „ vong
C. 聯 ˏlün

Shade

In the ——

M. 在陰凉兒裏 tsai⁴ yin¹ liang² 'rh li
S. 拉陰地 la⁷ iung di⁷
C. 在於遮陰之中 tsoi² ˏyü ˏche ˏyam ˏchí ˏchung

Shake

M. 搖撼 yao² huang; 搖動 yao² tung⁴
S. (1) yau hwaung; (2) yau ˏdong
C. 郁 yuk˩; (2) ˏyíú tung²

To —— the head

M. 搖頭 yao² t'ou²
S. „ „ yau deu
C. 撓 „ ning² ˏt'aú

To —— clothes

M. 抖摟衣裳 tou³ lou i¹ shang
S. „ 衣裳 ˏt'eu i-zaung
C. 抉 „ 服 ˏyöng ˏyí fuk˩

Shallow

M. 淺 ch'ien³
S. „ ˏts'ien
C. „ ˏts'ín

Sharp

M. 快 k'uai⁴
S. „ kw'a⁷
C. 利 léi²

Shave

M. 刮 kua¹
S. 剃 t'i⁷
C. „ t'ai⁷

—— **the head**

M. 剃頭 t'i⁴ t'ou²
S. „ „ t'i⁷ deu
C. „ „ t'ai⁷ ˏt'aú

Shave the face

M. 刮臉 kua[1] lien[3]
S. „ 面孔 kwa mien' k'ong
C. 剃鬚 t'ai' ˌsò

She

M. 他 t'a[1]
S. 伊 yi
C. 佢 ˧k'ui

Sheep

M. 羊 yang[2]
S. „ yang
C. 綿羊 ˌmín ˌyöng ; 羊咩 ˌyöng ˌme

Sheet

M. 被褥子 pei[4] tan[1] tzŭ
S. „ 單 ˅bi tan
C. „ „ ˧p'éi ˌtán

A —— of paper

M. 一張紙 i[1] chang[1] chih[3]
S. „ „ „ ih tsang ˅ts
C. „ „ „ yatˌ ˌchöng ˅chí

Shell

M. 皮兒 p'i[2] 'rh ; 殼 k'o[2]
S. „ bi ; (2) k'auh
C. (2) hokˌ

Sea ——

M. 海螺 hai[3] lo[2]
S. „ „ ˅he loo
C. „ „ ˅hoi ˌlo

Shell (for cannon)

M. 砲子兒 p'ao[4] tzŭ[3] 'rh
S. „ 彈 p'au' dan
C. „ 碼 p'áú' ˧má

Shine

M. 發光 fa[1] kuang[1]
S. „ „ fah kwaung
C. „ „ fátˌ ˌkwong

The sun shines

M. 太陽曬 t'ai[4] yang shai[4]
S. 日頭亮 nyih deu liang'
C. 熱 „ 曬 yítˌ ˧t'aú* shái'

To make —— (by rubbing)

M. 磨光了 mo[2] kuang[1] lo
S. „ „ moo kwaung
C. „ „ ˧mo ˌkwong

Ship

M. 船 ch'uan[2]
S. „ zen
C. „ ˧shün

War ——

M. 兵船 ping[1] ch'uan[2]; 軍艦 chün[1] hsien[4]
S. (1) ping zen; (2) kyuin chien
C. (1) ˌping ˧shün ; 戰艦 chín' lám[2]

Shirt

M. 汗衫 han[4] shan[1]
S. „ „ 'oen' san
C. „ „ honˌ ˌshám

Shoe

M. 鞋 hsieh²
S. „ 子 ᶜa-ᶜts
C. „ ˌhái

A pair of shoes

M. 一雙鞋 i¹ shuang¹ hsieh²
S. „ „ „ 子 ih saung ᶜa-ᶜts
C. „ 對 „ yatˌ tuiˀ ˌhái

Sole of a ——

M. 鞋底子 hsieh² ti³-tzŭ
S. „ „ ᶜa ᶜti
C. „ „ ˌhái ᶜtai

To put on one's shoes

M. 穿鞋 ch'uan¹ hsieh²
S. 着 „ 子 tsak ᶜa-ᶜts
C. „ „ chökˌ ˌhái

To take off one's shoes

M. 脫鞋 t'o¹ hsieh²
S. „ „ 子 t'oeh ᶜa-ᶜts
C. „ „ t'ütˌ ˌhái

Horse ——

M. 馬掌 ma³ chang³
S. „ 脚鐵 mo kyak t'ih
C. „ 夾ˌmá kápˌ

Shoot (artillery)

M. 放砲 fang⁴ p'ao⁴
S. „ „ faungˀ p'auˀ
C. „ „ fongˀ p'áúˀ

Shoot (rifle)

M. 放鎗 fang⁴ ch'iang¹
S. „ „ faungˀ ts'iang
C. „ „ fongˀ ˌtsˌ'öng

Shop

M. 舖子 p'u⁴ tzŭ
S. 店 tienˀ; 店舖 tienˀ p'ooˀ
C. 舖頭 p'òˀ ˌt'aú*

Shore

M. 岸 an⁴; 沿 yen²
S. „ ngoenˀ; (2) yien
C. „ ngon²

To go on ——

M. 上岸 shang⁴ an⁴
S. „ „ ᶜzaung ngoenˀ
C. „ „ ᶜshöng ngon²; 埋街 ˌmái ˌkái

Short

M. 短 tuan³
S. „ ᶜtoen
C. „ ᶜtün

A —— cut

M. 近道兒 chin⁴ tao⁴ 'rh
S. „ 路 ᶜjung looˀ
C. 一條短路 yatˌ ˌt'íú ᶜtün lòˀ

Shot

M. 彈子 tan⁴ tzŭ
S. „ „ danˀ-ᶜts
C. „ „ ṭánˀ ᶜtsz; 炮碼 p'áúˀ ᶜmá

Shot, small

M. 沙子 sha[1] tzŭ
S. „ „ so-ᶜts
C. „ ˌshá

Shoulder

M. 髈子 pang[3] tzŭ; 肩髈兒 chien[1] pang[3] 'rh
S. 肩髈 kyien paung; 肩胛 kyien ka
C. 膊頭 pokₒ ˌt'aú*

To carry on the ——

M. 扛 k'ang[2]
S. 掮 jien
C. 托 t'okₒ

Shout

M. 大聲叫喊 ta[4] shêng[1] chiao[4] han[3]
S. 喊 han[3]; 叫喊 kyau[3] han[3]
C. 喝 hotₒ

Show

M. 指 chih[3]; 顯 hsien[3]
S. (1) ts[3]; (2) ᶜhyien; 表明 ᶜpiau ming
C. (1) ᶜchí; (2) ᶜhín; 指出 ᶜchí ch'utˌ

To —— one's skill

M. 顯手段 hsien[3] shou[3] tuan[4]
S. „ 本事 ᶜhyien ᶜpung z[3]
C. „ 手段 ᶜhín ᶜshaú tün[2]

To show him the way to Peking

M. 指給他上京的道 chih[3] kei[3] t'a shang[4] ching[1] ti tao[4]
S. 指點伊進京个路 ts[3] ᶜtien yi tsing[3] kyung kuh loo
C. 指示佢上京個條路 ᶜchí shɿ[2] ᴳk'ui ᴳshöng ˌking ko[3] ˌt'íu lò[2]

Show it to me

M. 給我看 kei[3] wo[3] k'an[4]
S. 撥 „ „ peh ᶜngoo k'oen[3]
C. 俾 „ 睇 ᶜpéi ᴳngo ᶜt'ai

Shrapnel

M. 石榴子彈 shih[2]-liu[2] tzŭ tan[4]
S. „ „ „ „ zak-lieu ᶜts dan[3]
C. 開花彈 ˌhoi ˌfá tán[2]; 榴霰彈 ˌlaú sín[3] tán[2]

Shut

M. 關 kuan[1]; 閉 pi[4]
S. „ kwan; „ pi[3]
C. 閂 ˌshán

—— the window

M. 關窗戶 kuan[1] ch'uang[1] hu[4]
S. „ „ kwan ts'aung
C. 閂 „ 門 ˌshán ˌch'öng ˌmún

Shut the box

M. 蓋上箱子 kai⁴ shang⁴ hsiang¹-tzŭ

S. „ „ „ „ ke˃ ᶜzaung siang-ᶜts

C. 閂埋個箱 ᶜshán ˍmái ko˃ ᶜsöng

—— **the eyes**

M. 閉眼睛 pi⁴ yen³-ching

S. „ „ „ pi˃ ᶜngan-tsing

C. 合埋眼 hop₂ ˍmái ᶜngán

Sick

M. 有病 yu³ ping⁴; 病了 ping⁴ lo

S. (1) ᶜyeu bing˃; 病 bing˃

C. 病 peng²†

Side

M. 邊 pien¹; 旁邊 p'ang² pien¹

S. (1) pien; (2) baung pien

C. (1) ₒpín; (2) ˍp'ong ᶜpín

—— **by** ——

M. 挨肩 ai¹ chien¹

S. 並排 bing˃ ba

C. „ 肩 ping˃ ᶜkín

On all sides

M. 四下裏 ssŭ⁴ hsia⁴ li

S. „ „ s˃ ᶜᶜau

C. 周圍 ᶜchaú ˍwai

This side of the mountain

M. 山這邊 shan¹ chê⁴ pien

S. „ 个第邊 san kuh di˃ pien

C. „ 呢邊 ᶜshán ᶜni ₒpín

Sight

M. 眼力 yen³ li⁴

S. „ „ ᶜngan lih

C. „ „ ˍngán lik₂

Short ——

M. 近視眼 chin⁴ shih yen³

S. „ „ „ ᶜjung z˃ ᶜngan

C. „ „ „ kan² shí² ˍngán

—— **of a gun**

M. 星斗 hsing¹ tou³; 苗頭 miao² t'ou²

S. 照星 tsau˃ sing

C. (2) ˍmíú ˍt'aú

Signal

M. 號 hao⁴; (flag) 號旗 hao⁴ ch'i²

S. (1) 'au˃; (flag) (2) 'au˃ ᶜji

C. (1) hò²; (flag) (2) hò² ˍk'éi

To make a ——

M. 打號旗 ta³ hao⁴ ch'i²

S. „ „ „ ᶜtang 'au˃ ᶜji

C. „ „ „ ᶜtá hò² ˍk'éi

Silence (keep)

M. 不說話 pu⁴ shuo¹ hua⁴

S. 勿響 'veh ᶜhyang; 勿說話 veh ˌsoeh wo˃

C. 咪出聲 ᶜmai ch'ut, ᶜsheng†

Silent

M. 靜靜 ching⁴ ching⁴; 靜密 ching⁴ mi⁴
S. (1) ᶜzing ᶜzing; 默默 muh muh
C. (1) tsing² tsing²*

Silver

M. 銀子 yin²-tzŭ
S. „ „ nyung-ᶜts
C. „ ₍ngan*

Simple

M. (man) 樸實 pᶜu² shih; (dress) 樸素 pᶜu² su
S. (man) (1) pᶜok seh; (dress) (2) pᶜok soo˃
C. (man) (1) pᶜok₀ shat₂; (dress) 素裝 sò˃ ₍chong

Since

M. 自從 tzŭ⁴ tsᶜung
S. „ „ z˃ dzong
C. „ „ tsz² ₍tsᶜung

—— **last year**

M. 自去年以來 tzŭ⁴ chᶜü⁴ nien² i³ lai²
S. 從舊年 dzong jeu˃ nyien
C. 自從舊年以後 tsz² ₍tsᶜung kaú² ₍nín ᶜyí ᶜhaú²

—— **(seeing that)**

M. 旣 chi⁴; 旣然 chi⁴ jan²
S. „ kyi˃; „ „ kyi˃ zen
C. „ ke˃; „ „ ke˃ ₍yín

Sing

M. 唱 chᶜang⁴
S. „ tsᶜaung˃
C. „ chᶜöng˃

Single

M. 單 tan¹; 獨 tu²
S. „ tan; „ dok
C. „ ₍tán; „ tuk₂

Sink

M. 沉 chᶜên²; 沉下 chᶜên² hsia
S. „ dzung; (2) dzung ᶜᶜau
C. „ ₍chᶜam

To —— a ship

M. 沉船 chᶜên² chᶜuan²
S. „ „ dzung zen
C. „ „ ₍chᶜam ₍shün

Sister (elder)

M. 姐姐 chieh³ chieh
S. 阿姊 ah ᶜtsi
C. 亞姐 á˃ ᶜtse

—— **(younger)**

M. 妹妹 mei⁴ mei
S. „ „ me˃ me˃
C. 亞 „ á˃ mui²*

Sit

M. 坐 tso⁴; 坐下 tso⁴ hsia
S. „ ᶜzoo; „ „ ᶜzoo ᶜᶜau
C. „ ᶜtsᶜo†

Six

M. 六 liu[4]
S. „ lok
C. „ luk$_2$

Size

M. 大小 ta[4] hsiao[3]
S. „ „ doo^5 ^{c}siau
C. „ 細 tái[2] sai^5

What is the —— of this house?

M. 這個房子有多大 chê[4] ko fang[2]-tzŭ yu[3] to[1] ta[4]
S. 第个屋有啥大小 di^5 kuh ok ^{c}yeu sa^5 doo^5 ^{c}siau
C. 呢間屋有幾大 $_c$ni $_c$kan uk$_5$ $_s$yaú ^{c}kéi tái[2]?

Skilful

M. 有本事 yu[3] pên[3] shih[4]; 有能幹 yu[3] nêng[2] kan[4]
S. (1) ^{c}yeu ^{c}pung z^5; (2) ^{c}yeu nung koen^5
C. 好本事 ^{c}hò ^{c}pún sz[2]

A —— workman

M. 巧手 ch'iao[3] shou[3]
S. „ „ ^{c}chau ^{c}seu
C. „ „ ^{c}haú ^{c}shaú

Skin

M. 皮 p'i[2]
S. „ bi
C. „ $_s$p'éi

Skin, to

M. 剝皮 pao[1] p'i[2]
S. „ „ pok bi
C. „ „ mok$_5$ $_s$p'éi

Slaughter

M. 殺 sha[1]; (cattle) 宰 tsai[3]
S. „ sah; „ „ ^{c}tse
C. „ shát$_o$; „ 劏 $_c$t'ong

Sleep

M. 睡 shui[4]; 睡覺 shui[4] chiao[4]
S. 睏 kw'ung^5; 睏覺 kw'ung^5 kau^5
C. (1) shui[2]; 瞓 fan^5

Unable to ——

M. 睡不着覺 shui[4] pu[4] chao[2] chiao[4]
S. 睏勿著 kw'ung^5'veh dzak
C. 唔瞓得 $_s$m fan^5 tak$_5$

Sleeve

M. 袖子 hsiu[4] tzŭ
S. „ „ zieu^5-^{c}ts
C. „ tsaú[2]

Slip (vb.)

M. 失脚 shih[1] chiao[3]; 跌倒 tieh[1] tao[3]; 滑 hua[2]
S. (1) sek kyak; (2) tih ^{c}tau; (3) wah
C. (1) shat$_5$ kök$_o$; 蹋 shín^5

I slipped and fell

M. 我滑倒了 wo^{3} hua^{2} tao^{3} lo

S. „ „ „ „ ᶜngoo wah ᶜtau liau

C. „ 蹺脚跌倒 ᶜngo shin^{2} kök$_{o}$ tít$_{o}$ ᶜtò

Slow

M. 慢 man^{4}

S. „ man^{2}

C. „ mán^{2}

Small

M. 小 hsiao^{3}

S. „ ᶜsiau

C. 細 sai^{2}

Small-pox

M. 痘子 tou^{4} tzŭ; 天花 t'ien^{1} hua^{1}

S. (1) deu^{2}-ᶜts; (2) t'ien hwo

C. 天花痘 ₵t'ín ₵fá taú^{2}*

To have ——

M. 出花兒 ch'u^{1} hua^{1} 'rh

S. „ „ ts'eh hwo

C. „ 痘 ch'ut$_{5}$ taú^{2}*

Smell (noun)

M. 氣味 ch'i^{4} wei

S. „ „ chi^{2} mi^{2}

C. „ „ hi^{2} méi^{2}

Smoke (noun)

M. 煙 yen^{1}

S. „ ien

C. „ ₒyín

To smoke tobacco

M. 吃煙 ch'ih^{1} yen^{1}

S. „ „ chuh ien

C. 食烟 shik$_{2}$ ₒyin

Smooth

M. 平 p'ing^{2}; 光 kuang

S. „ bing; „ kwaung

C. „ 滑 ₵p'ing wát$_{2}$

Snow

M. 雪 hsüeh^{3}

S. „ sih

C. „ süt$_{o}$

To ——

M. 下雪 hsia^{4} hsüeh^{3}

S. 落 „ lauh sih

C. „ „ lok$_{2}$ süt$_{o}$

Soap

M. 胰子 i^{2} tzŭ

S. 肥皂 bi zau^{2}

C. 洋覭 ₵yöng ᶜkán

Soda-water

M. 荷蘭水 ho^{2} lan^{2} shui^{3}; 氣水 ch'i^{4} shui^{3}

S. (1) ᶜoo lan ᶜs; (2) chi ᶜs

C. (1) ₵ho ₵lán ᶜshui

Soft

M. 軟 juan^{3}

S. „ ᶜnyoen

C. 腍 ₵nam; 軟 ᶜyün

Soldier

M. 兵 ping[1]
S. „ ping
C. „ ˌping

Sometimes

M. 有時候 yu[3] shih[2] hou[4]
S. „ „ „ ˈyeu z-ˈeu
C. „ „ ˈyaú ˌshí

Somewhere

M. 不定何處 pu[4] ting[4] ho[2] chˈu[4]
S. 某地方 ˈmeu diˌ faung
C. 不定何處 patˌ tingˌ[2] ˌho chˈüˌ

To go —— else

M. 往別處去 wang[3] pieh[2] chˈu[4] chˈü[4]
S. 到 „ 地方去 tauˌ bih diˌ faung chiˌ
C. 去 „ 處 huiˌ pítˌ chˈüˌ

Son

M. 兒子 êrh[2] tzŭ
S. „ „ ˈeu-ˈts
C. 仔 ˈtsai

Song

M. 曲兒 chˈü[3] ˈrh ; 歌 ko[1]
S. „ 子 chok-ˈts ; „ koo
C. 歌仔 ˌko ˈtsai

Soon

M. 快 kˈuai[4]; 早 tsao[3]
S. „ kwˈaˌ; „ ˈtsau
C. 冇幾耐 ˈmò ˈkéi noiˌ[2]*;
歇冇耐 hítˌ ˈmò noiˌ[2]*

A little sooner

M. 早點兒 tsao[3] tie(n)[3] ˈrh
S. „ 一點 ˈtsau ih ˈtien
C. „ 的咁多 ˈtsò tíkˌ komˌ ˌto

As —— as he saw me

M. 他一見了我 tˈa[1] i[1] chien[4] lo wo[3]
S. 伊一看見我 yi ih kˈoenˌ kyienˌ ˈngoo
C. 佢一見我 ˈkˈui yatˌ kínˌ ˈngo

Sound

M. 聲 shêng[1]
S. „ sung
C. „ ˌsheng†

—— (of a word)

M. 音 yin[1]
S. „ iung
C. „ ˌyam

Soup

M. 湯 tˈang[1]
S. „ tˈaung
C. „ ˌtˈong

Sour

M. 酸 suan[1]
S. „ soen
C. „ ˌsün

South

M. 南 nan²
S. „ nen
C. „ ˩nám

Spade

M. 鏟 ch'an³
S. „ ˂ts'an
C. „ ˂ch'án

Spark

M. 火星兒 huo³ hsing¹ 'rh
S. „ „ ˂hoo sing
C. „ „ ˂fo ˏsing

Speak

M. 說話 shuo¹ hua⁴
S. „ „ soeh wo˒
C. 講說話 ˂kong shüt˳ wá²

To —— to him

M. 和他說話 ho²t'a¹shuo¹ hua⁴
S. 同伊 „ „ dong yi soeh wo˒
C. 對佢講 tui˒ ˩k'ui ˂kong

To —— Chinese

M. 說中國話 shuo¹ chung¹ kuo hua⁴
S. „ „ „ „ soeh tsong kok wo˒
C. 講唐話 ˂kong ˩t'ong wá²*

Specially

M. 特意的 t'ê⁴ i⁴ ti; 專 chuan¹
S. 特意个 duh i˒ kuh; (2) tsen
C. „ 登 tak˳ ˏtang; (2) ˏchün

Speed

M. 快慢 k'uai⁴ man⁴
S. „ „ kw'a˒ man˒
C. „ „ fái˒ mán²

Spend

M. 費用 fei⁴ yung⁴; 費花錢 fei⁴; hua¹ ch'ien²
S. (1) fi˒ yong˒; (2) fi˒; (3) hwo dien
C. (1) fai˒ yung²; (2) fai˒; 使 ˂shai

Spirits (liquor)

M. 火酒 huo³ chiu³
S. „ „ ˂hoo ˂tsieu
C. 燒 „ ˏshíú ˂tsaú

In good ——

M. 精神好 ching¹ shên hao³
S. 神氣 „ zung chi˒ ˂hau
C, 精神 „ ˏtsing ˩shan ˂hò

Spoon

M. 杓子 shao² tzŭ
S. 抄 ts'au
C. 匙羹 ˩shí ˳kang

Tea ——

M. 匙子 ch'ih² tzŭ
S. 茶匙 dzo z
C. „ 羹 ˩ch'á ˳kàng

Spring (season)

M. 春天 ch'un¹ t'ien¹
S. „ „ ts'ung t'ien
C. „ „ ˌch'un ˌt'ín

—— (watch)

M. 發條 fa¹ t'iao²
S. „ „ fah diau
C. „ „ fát˳ ˩t'íú

—— (vb.)

M. 跳 t'iao⁴
S. „ t'iau⁾
C. „ t'íú⁾

Spur

M. 馬扎子 ma³ cha²-tzŭ
S. 策馬距 ts'uh ˇmo jui⁾
C. 刺 „ „ ts'z⁾ ˧má ˩k'ui

Spy (noun)

M. 奸細 chien¹ hsi; 探子 t'an⁴-tzŭ
S. (1) kan si⁾; (2) t'en⁾-ˇts
C. (2) t'ám⁾ ˇtsz

Squadron (of cavalry)

M. 一起 (*or* 一隊) 馬兵 i¹ ch'i³ (*or* i¹ tui⁴) ma³ ping¹
S. 一起 (*or* 一隊) 馬兵 ih ˇchi (*or* ih de⁾) ˇmo ping
C. 騎兵中隊 ˩k'e ˌping ˌchung tui²

Squadron (of ships)

M. 一幫船 i¹ pang¹ ch'uan²
S. „ „ „ ih baung zen
C. „ „ „ yat˳ ˌpong ˩shün*

Squall

M. 一陣風 i¹ chên⁴ fêng¹
S. „ „ „ ih dzung⁾ fong
C. „ „ „ 雨 yat˳ chan² ˌfung ˧yü

Square

M. 四方的 ssŭ⁴ fang¹ ti
S. „ „ 个 s⁾ faung kuh
C. „ „ sz⁾ ˌfong

Three feet ——

M. 三尺見方 san¹ ch'ih³ chien⁴ fang¹
S. „ „ „ „ san ts'ak kyien⁾ faung
C. „ „ 方 ˌsám ch'ek˳†ˌfong

Stable

M. 馬棚 ma³ p'êng²
S. „ „ ˇmo bang
C. „ 房 ˧má ˩fong*

Stair

M. 梯子 t'i¹-tzŭ; 樓梯 lou² t'i¹
S. (2) leu t'i; 梯 t'i
C. (2) ˩laú ˌt'ai

Upstairs

M. 樓上 lou² shang
S. „ „ leu ˇlaung
C. „ „ ˩laú shöng²

Stand

M. 站 chan⁴
S. 立 lih
C. 企 ˩k'éi

To —— up

M. 站起來 chan⁴ ch'i lai; 立起來 li⁴ ch'i lai
S. (2) lih ˈchi le
C. 企起嚟 ˩k'éi ˈhéi ˧lai

Star

M. 星 hsing¹
S. ,, sing
C. ,, ˧sing

Pole ——

M. 北斗星 pei³ tou³ hsing¹
S. ,, ,, ,, pok ˈteu sing
C. ,, ,, ,, pak˩ ˈtaú ˧sing

Start (journey)

M. 起身 ch'i³ shên¹; 動身 tung⁴ shên¹; 開船 k'ai¹ ch'uan²
S. (1) ˈchi sung; (2) ˈdong sung; (3) k'e zen
C. 開行 ˧hoi ˧háng; 起脚行 ˈhéi kök˩ ˧hang†

—— work

M. 開工 k'ai¹ kung¹
S. ,, ,, k'e kong
C. ,, ,, ˧hoi ˧kung

State (condition)

M. 光景 kuang¹ ching
S. ,, ,, kwaung ˈkyung
C. ,, ,, ˧kwong ˈking

—— (country)

M. 國家 kuo² chia
S. ,, ,, kok kya
C. ,, kwok˩

Station (vb.) (**troops**)

M. 駐劄 chu⁴ cha²
S. ,, 紮 dzu tsah
C. ,, 劄 chü˩ cháp˩

Police ——

M. 巡捕房 hsün² pu³ fang²
S. ,, ,, ,, dzing boo˩ vaung
C. 差館 ˧ch'ai ˈkwún

Railway ——

M. 火車站 huo³ ch'ê¹ chan⁴
S. ,, ,, ,, ˈhoo ts'o dzan
C. ,, ,, ,, 頭 ˈfo ˧ch'e chám² ˧t'aú

Stay

M. 住 chu⁴; 住下 chu⁴ hsia
S. ,, dzu˩; 登拉 tung la˩
C. ,, chü²; (2) chü² há²

Steal

M. 偷 t'ou¹
S. ,, t'eu
C. ,, ˧t'aú

Steam (noun)

M. 氣 ch'i⁴
S. „ chi³
C. „ héi³

Steamer

M. 火輪船 huo³ lun² ch'uan²
S. „ „ „ ʿhoo lung zen
C. „ 船 ʿfo ₍shün

Steel

M. 鋼 kang¹
S. „ kaung
C. „ kong³

Steer

M. 掌舵 chang³ to⁴; 把舵 pa⁴ to⁴
S. (1) ʿtsang ʿdoo; (2) ʿpo ʿdoo
C. 揸舵 ₍chá t'ái³

Stem (of a plant)

M. 梗兒 kêng³ 'rh
S. „ ʿkang
C. 莖 ₍hang

Stick (noun)

M. 棍子 kun⁴-tzŭ; 拐棍 kuai³ kun⁴
S. (1) ʿkwung-ʿts; 拐杖 kwa ʿdzang
C. (1) kwan³; 拐杖 ʿkwai chöng²

Still (adv.)

M. 還 hai²; 仍 jêng²; 尚且 shang⁴ ch'ieh
S. (1) wan; 仍舊 dzung jeu³; (3) zang³ ʿts'ia
C. 仍然 ₍ying ₍yín; 越 yüt₂; 重 chung²

There is more ——

M. 還有 hai² yu³
S. „ „ wan ʿyeu
C. 重 „ chung² ʿyaú

Stirrups

M. 馬鐙 ma³ têng⁴
S. „ „ ʿmo tung³
C. „ 踏橙 ʿmá táp₀ tang³

Stockings

M. 襪子 wa⁴-tzŭ
S. „ mah
C. „ mat₂

Stomach

M. 肚子 tu⁴-tzŭ
S. „ 皮 ʿdoo bi
C. „ ʿt'ò

Stone

M. 石頭 shih²-t'ou
S. „ „ zak deu
C. „ („) shek₂ (₍t'aú)

Stop (trans.)

M. 停止 t'ing² chih³; 停住 t'ing² chu⁴
S. (1) ding ʿts; (2) ding dzu³
C. (1) ₍t'ing ʿchí

To stop business

M. 罷市 pa⁴ shih⁴
S. „ „ ʿbo ʿz
C. „ „ pá² ˩shí

To —— work

M. 住手 chu⁴ shou³
S. 歇 „ hyih ʿseu
C. 收工 ˩shaú ˩kung

—— (intrans.)

M. 站住 chan⁴ chu⁴
S. 停 ding
C. 歇住 hít₀ chü²

Stores

M. (provisions) 伙食 huo³ shih²; (gear) 傢伙 chia¹ huo
S. (provisions) (1) ʿhoo zuh; (gear) (2) kya ʿhoo
C. (provisions) (1) ʿfo shik₂; (gear) (2) ˩ká ʿfo

Storm

M. 大風 ta⁴ fêng¹; 暴風 pao⁴ fêng¹
S. 大風雨 doo˒ fong ʿyui
C. 打 „ ʿtá ˩fung

Straight

M. 直 chih²
S. „ dzuh
C. „ chik₂

To go straight ahead

M. 一直走 i¹ chih² tsou³
S. „ „ „ ih dzuh ʿtseu
C. „ „ 前去 yat₅ chik₂ ˩ts'ín hui˒

A —— line

M. 直線 chih² hsien⁴
S. „ „ dzuh sien˒
C. „ „ chik₂ sín˒

Strange

M. 奇怪 ch'i² kuai⁴; 怪 kuai⁴
S. (1) ji kwa˒; (2) kwa˒
C. (1) ˩k'éi kwái˒; (2) kwái˒

Stranger

M. 外人 wai⁴ jên²; 客人 k'o⁴ jên²
S. (1) nga˒ nyung; (2) k'ak nyung; 驀生人 mak sang nyung
C. 生客 ˩sháng hák₀; 遠客 ˩yün hák₀

Strap

M. 皮條 p'i² t'iao²; 皮帶 p'i tai⁴
S. „ „ bi diau; (2) bi ta˒
C. (2) ˩p'éi tái˒

Straw

M. 草 ts'ao³
S. „ ʿts'au
C. 禾稈 ˩wo ʿkon

Stream

M. 小河 hsiao^{3} ho^{2}
S. ,, ,, ˁsiau ˁoo
C. ,, ,, ˁsiú ˌho

Street

M. 街 chieh^{1}
S. ,, ka
C. ,, ˌkái

In the ——

M. 在街上 tsai^{4} chieh^{1} shang
S. ,, ,, ,, ˁdze ka ˁlaung
C. ,, ,, ,, tsoi^{2} ˌkái shöng^{2}

Strength

M. 力量 li^{4} liang; 力氣 li^{4} chˁi
S. (1) lih liang; (2) lih chi^{3}
C. (1) lik$_{2}$ löng^{2}; 氣力 héi^{3} lik$_{2}$

Strike

M. 打 ta^{3}; 毆打 ou^{1} ta^{3}
S. ,, ˁtang; 敲打 kˁau ˁtang
C. (1) ˁtá; (2) aŭ^{3} ˁtá

To —— work

M. 罷工 pa^{4} kung^{1}
S. ,, ,, ˁbo kong
C. ,, ,, pá^{2} ˌkung

String

M. 繩子 shêng^{2}-tzŭ
S. ,, zung; 線 sien^{3}
C. ,, ˌshing

Strong

M. 結實 chieh^{1}-shih; 有力量 yu^{3} li^{4}-liang
S. (1) kyih zeh; 强壯 jang tsaung^{3}
C. 有力嘅 ˁyaú lik$_{2}$ ke^{3}

—— (robust)

M. 壯 chuang^{4}
S. ,, tsaung^{3}
C. ,, chong^{3}

This wall is very ——

M. 那城牆狠堅固 na^{4} chˁêng^{2} chˁiang^{2} hên^{3} chien^{1} ku^{4}
S. 第个城牆極堅固 di^{3} kuh dzung ziang juh kyien koo^{3}
C. 呢幅牆好堅固 ˌni fuk$_{5}$ ˌtsˁöng ˁhò ˌkín kwú^{3}

Stupid

M. 糊塗 hu^{2} tˁu; 蠢笨 chˁun^{3} pên
S. 呆笨 nge bung
C. 愚蠢 ˌyü ˁchˁun

Submarine

M. 潛水艇 chˁien^{2} shui^{3} tˁing^{3}; 海底行船 hai^{3} ti^{3} hsing^{2} chˁuan^{2}
S. (1) zien ˁs tˁing; 水底潛行艇 ˁs ˁti zien ˁang tˁing
C. (1) ˌtsˁím ˁshui ˁtˁeng†

Sudden

M. 忽然 hu[1] jan[2]
S. ,, ,, hweh zen
C. ,, ,, fat$_5$ ˏyín

Sugar

M. 糖 t'ang[2]
S. ,, daung
C. ,, ˏt'ong

Suitable

M. 合式 ho[2] shih[4]; 合宜 ho[2] i[2]
S. (1) 'eh suh; (2) 'eh nyi
C. (1) hop$_2$ shik$_5$

Is perfectly ——

M. 很可以 hên[3] k'o[3] i[3]
S. 極合宜 juh 'eh nyi
C. 正 ,, 式 ching' hop$_2$ shik$_5$

Summer

M. 夏天 hsia[4] t'ien
S. ,, ,, 'au' t'ien
C. ,, ,, há[2] ˏt'ín

Sun

M. 日頭 jih[4] t'ou; 太陽 t'ai[4] yang
S. (1) nyih deu; (2) t'a' yang
C. (1) yat$_5$ ˏt'au*; 熱頭 yít$_2$ ˏt'aú*; 日光 yat$_2$ ˏkwong

In the ——

M. 在太陽地裏 tsai[4] t'ai[4] yang ti[4] li
S. 在太陽地裏 ˁdze t'a' yang di' ˁli
C. 在熱頭處 tsoi[2] yít$_2$ ˏt'aú* shü'

Sunday

M. 禮拜日 li[3] pai[4] jih[4]
S. ,, ,, ,, ˁli pa' nyih
C. ,, ,, ,, ˁlai pái' yat$_2$

Sunrise

M. 太陽出(*or* 天亮)的時候 t'ai[4] yang ch'u[1](*or* t'ien[1] liang) ti shih[2] hou
S. 太陽出來(*or* 天亮)个時候 t'a' yang ts'eh le(*or* t'ien liang')kuh z-'eu'
C. 日出 yat$_2$ ch'ut$_5$

Sunset

M. 太陽落的時候 t'ai[4] yang lao[4] ti shih[2] hou
S. 太陽落山个時候 t'a' yang lauh san kuh z-'eu'
C. 日落 yat$_2$ lok$_2$

Supplies

M. 伙食 huo[3] shih[2]; 傢伙 chia[1] huo; (mil.) 軍需 chün[1] hsü[1]
S. (1) ˁhoo zuh; (2) kya ˁhoo; (mil.) (3) kyuin sui
C. (1) ˁfo shik$_2$; (mil.) (3) ˏkwan ˏsui

Surgeon

M. 太夫 tai⁴ fu; 外科先生 wai⁴ k'o¹ hsien¹ shêng
S. (2) nga' k'oo sien sang
C. (2) ngoi² ˌfo ˌsín ˌsháng

Surrender

M. 投降 t'ou² hsiang²; 降服 hsiang² fu²
S. (1) deu ˇaung
C. (1) ˌt'aú ˌhong

Suspect

M. 疑惑 i² huo
S. ,, ,, nyi wo
C. 思疑 ˌsz ˌyí

Sweet

M. 甜 t'ien²; 甘甜 kan¹ t'ien²
S. ,, dien
C. ,, ˌt'ím

Swim

M. 浮水 fu² shui³
S. 游 ,, yeu ˇs
C. 泅 ,, ˌyaú ˇshui

Sword

M. 刀 tao¹; 腰刀 yao¹ tao¹
S. (1) tau; (2) iau tau
C. 劍 kím'

To draw a ——

M. 拔刀 pa² tao¹
S. ,, ,, bah tau
C. ,, 劍 pat₂ kím'

Table

M. 桌子 cho¹-tzŭ
S. 檯 ,, de-ˇts
C. ,, ˌt'oi*

Tael (ounce weight)

M. 兩 liang³
S. ,, ˇliang
C. ,, ˇlöng

Take

M. 拏 na²; 把 pa⁴
S. ,, nau
C. 擺 ˇlo; 掙 ˌning; 拈 ˌním

To —— out

M. 拏出來 na² ch'u¹ lai²
S. ,, ,, ,, nau ts'eh le
C. 掙 ,, 去 ˌning ch'ut, hui'

To —— away

M. 拏去 na² ch'ü⁴
S. ,, ,, nau chi'
C. 掙 ,, ˌning hui'; 取 ˇts'ui

Talk

M. 說話 shuo¹ hua⁴
S. 白 ,, bak wo'
C. 講 ˇkong

Tall

M. 高 kao¹; 長 ch'ang²
S. ,, kau; ,, dzang
C. ,, ˌkò

Tame

M. 熟 shou²; 養熟的 yang³ shou² ti
S. (1) zok; 養熟 ʿyang zok
C. (1) shuk₂; 純 „ ₵shun shuk₂

Target

M. 靶子 pa⁴-tzŭ
S. „ „ po'-ʿts
C. „ „ ʿpá-ʿtsz

Taste

M. 味兒 we(i)⁴ 'rh; 滋味 tzŭ¹ wei; 味道 wei⁴ tao
S. (2) ts mi'; (3) mi dau'
C. (3) méi² tò²

Sense of ——

M. 口味 k'ou³ wei⁴
S. „ „ ʿk'eu mi'
C. „ „ ʿhaú méi²

—— (vb.)

M. 嘗嘗 ch'ang² ch'ang²
S. „ „ zaung zaung
C. „ ₵shöng

Tea

M. 茶 ch'a²
S. „ dzo
C. „ ₵ch'á

To make ——

M. 沏茶 ch'i¹ ch'a²
S. 泡 „ p'au' dzo
C. 煲茶 ₵pò ₵ch'á; 冲茶 ₵ch'ung ₵ch'á

Teacup

M. 茶碗 ch'a² wan³
S. „ „ dzo ʿwen
C. „ 杯 ₵ch'á ₒpúi

—— pot

M. 茶壺 ch'a² hu²
S. „ „ dzo ʿoo
C. „ „ ₵ch'á ₵wú

Teach

M. 教 chiao⁴; 教訓 chiao⁴ hsün
S. „ kyau'; (2) kyau' hyuin
C. „ káú'

Teacher

M. 先生 hsien¹ shêng; 師傅 shih¹ fu
S. (1) sien sang; (2) s foo
C. (1) ₵sín ₵sháng

Tear

M. 撕開 ssŭ¹ k'ai¹; 扯開 ch'ê³ k'ai¹
S. (1) s k'e; (2) ʿts'a k'e
C. 擘爛 mák₅ lán²

The paper is torn

M. 紙撕了 chih³ ssŭ¹ lo
S. „ 扯破哉 ʿts ʿts'a p'oo' tse
C. 呢張紙撕爛咯 ₵ni ₵chöng ʿchí ₵sz lán² lok₅

To tear to pieces

M. 撕碎 ssŭ[1] sui[4]
S. „ „ s se[5]
C. 扯 „ ᶜch'e sui[5]

Telegraph

M. 電報 tien[4] pao[4]
S. „ „ dien[5] pau[5]
C. „ „ tín[2] pò[2]

—— wires

M. 電線 tien[4] hsien[4]
S. „ „ dien[5] sien[5]
C. „ „ tín[2] sín[5]

—— pole

M. 電杆 tien[4] kan[1]
S. „ „ dien[5] kan
C. „ 線柱 tín[2] sín[5] ᶜch'ü

Wireless telegraphy

M. 無線電報 wu[2] hsien[4] tien[4] pao[4]
S. „ „ „ „ m sien[5] dien[5] pau[5]
C. „ „ „ „ ᶜmò sín[5] tín[2] pò[5]

Telegram

M. 電信 tien[4] hsin[4]
S. „ „ dien[5] sing[5]
C. „ „ tín[2] sun[5]

To send a ——

M. 打電報 ta[3] tien[4] pao
S. „ „ „ ᶜtang dien[5] pau[5]
C. „ „ „ ᶜtá tín[2] pò[2]

Telescope

M. 千里鏡 ch'ien[1] li[3] ching[4]
S. „ „ „ ts'ien ᶜli kyung[5]
C. „ „ „ ᶜts'ín ᶜléi keng[5] †

Tell

M. 告 kao[4]; 告訴 kao[4] su
S. „ kau[5]; „ „ kau[5] soo[5]
C. 話 . . . 知 wá[2] . . . ᶜchí;
話 . . . 聽 wá[2] . . . ᶜt'eng †

—— him to go

M. 叫他去 chiao[4] t'a[1] ch'ü[4]
S. „ 伊 „ kyau[5] yi chi[5]
C. „ 佢 „ kíú[5] ᶜk'ui hui[5]

Temple

M. 廟 miao[4]
S. „ miau[5]
C. „ míú[2]*

—— of Confucius

M. 文廟 wên[2] miao[4]
S. „ „ vung miau[5]
C. 聖 „ shing[5] míú[2]

Taoist ——

M. 觀 kuan[1]; 道廟 tao[4] miao[4]
S. (1) kwen; 道士堂 dau[5] ᶜz daung
C. (1) kwún[5]

Buddhist ——

M. 寺 ssŭ[4]; 佛廟 fo[2] miao[4]
S. „ z[5]; „ „ veh miau[5]
C. „ ts'z[2]*; 佛堂 fat̲ ᶜt'ong

Temple, ancestral

M. 祖廟 tsu^{3} miao^{4}
S. ,, ,, ʿtsoo miauˀ
C. ,, ,, ʿtsò míú^{2}; 祠堂 ˍtsʻz ˍtʻong; 宗廟 ˌtsung míú^{2}*

Ten

M. 十 shih^{2}
S. ,, zeh
C. ,, shap$_{2}$

Tent

M. 帳房 chang^{4} fang
S. ,, 篷 tsangˀ bong
C. ,, 房 chöngˀ ˍfong*

To pitch a ——

M. 設帳房 shê^{4} chang^{4} fang
S. ,, ,, ,, seh tsangˀ vaung
C. 搭帳幕 táp$_{o}$ chöngˀ mok$_{2}$; 立帳 láp$_{o}$ chöngˀ

Thank you

M. 多謝 to^{1} hsieh^{4}; 勞駕 lao^{2} chia^{4}; 借光 chieh^{4} kuang^{1}
S. (1) too ziaˀ; (3) tsiaˀ kwaung
C. (1) ˌto tse^{2}

That (pron.)

M. 那個 na^{4} ko; 那 na^{4}
S. 伊个 i kuh
C. 𠯿個 個 ʿko koˀ

Would that

M. 巴不得 pa^{1} pu^{4} tê^{2}
S. ,, 勿 ,, po ʼveh tuh
C. ,, 不 ,, ˌpá pat$_{5}$ tak$_{5}$

In order ——

M. 爲的是 . . . wei^{4} ti shih^{4}
S. ,, 則 weˀ tsuh; 以致 ʿi ʿts
C. 以得 ʿyí tak$_{5}$; 以爲 ʿyí wai^{2}

The

M. (when translated in speech mostly rendered by the equivalents of 'this' or 'that')
S. Ditto
C. Ditto

Their, theirs

M. 他們的 tʻa^{1} mên ti
S. 伊拉个 yi laˀ kuh
C. 佢𠯿地嘅 ʿkʻui téi^{2} keˀ

Them

M. 他們 tʻa^{1} mên
S. 伊拉 yi laˀ
C. 佢𠯿地 ʿkʻui téi^{2}

Both of ——

M. 他們倆 tʻa^{1} mẹn lia^{3}
S. 伊拉兩个 yi laˀ ʿliang kuh
C. 佢兩個 ʿkʻui ʿlöng koˀ

Then

M. 那時候 na⁴ shih² hou; 當時 tang¹ shih²

S. 伊个時候 i kuh z-'eu⁵; (2) taung z

C. 個陣時 ko⁵ chan² ˏshi*

—— **(afterwards)**

M. 然後 jan² hou⁴; 後來 hou⁴ lai²

S. (1) zen ᶜ"eu; (2) ᶜ"eu le

C. (1) ˏyín haú²; (2) haú² ˏloi

First . . . then . . .

M. 先 . . . 再 . . . hsien¹ . . . tsai⁴ . . .

S. ,, . . . ,, . . . sien . . . tse⁵

C. ,, . . . 噉就 ˏsín . . . ᶜkòm tsaú²

Thence

M. 從那裏 (*or* 那兒) ts'ung² na⁴ li (*or* na⁴ 'rh)

S. 從伊塊 dzong i k'we⁵

C. 由該處 ˏyaú ˏkoi ch'ü⁵

There

M. 那裏 na⁴ li; 那兒 na⁴ 'rh; 那邊 na⁴ pien

S. 伊塊 i k'we⁵; 垃拉 leh la⁵

C. 個處 ko⁵ shü⁵

These

M. 這 chê⁴; 這些(個) chê⁴ hsieh¹ (ko)

S. 第个 di⁵ kuh

C. 呢啲 ˏni ₒtí

—— **two men**

M. 這兩個人 chê⁴ liang³ ko jên²

S. 第 ,, 个 ,, di⁵ ᶜliang kuh nyung

C. 呢 ,, 個 ,, ˏni ᶜlöng ko⁵ ˏyan

They

M. 他們 t'a¹ mên

S. 伊拉 yi la⁵

C. 佢哋 ᶜk'ui téi²

Thick

M. 厚 hou⁴

S. ,, ᶜ"eu

C. ,, ᶜhaú

—— **mud**

M. 濃泥 nung² ni²

S. 厚爛泥 ᶜ"eu lan⁵ nyi

C. 結泥 kít₀ ˏnai

The foliage is very ——

M. 樹葉很密 shu⁴ yeh⁴ hên³ mi⁴

S. 樹葉極密 zu⁵ yih juh mih

C. ,, ,, 好 ,, shü² yíp₂ ᶜhò mat₂

Thief

M. 賊 tsei²
S. „ zuh
C. „ ts'ák₂*

Thimble

M. 頂針兒 ting³ chê(n)¹ 'rh
S. 抵 „ ᶜti tsung
C. 針頂 ₍cham ᶜting

Thin

M. 瘦 shou⁴
S. „ seu⁾; 薄 bok
C. „ shaú⁾; „ pok₂

Thing

M. 東西 tung¹ hsi; 物件 wu⁴ chien⁴
S. 物事 meh z⁾
C. 野 ᶜye; (2) mat₂ kín²

Think

M. 想 hsiang³; 想一想 hsiang³ i¹ hsiang³
S. (1) ᶜsiang; (2) ᶜsiang ih ᶜsiang
C. (1) ᶜsöng; 估 ᶜkwú

To —— of a plan

M. 想個法子 hsiang³ ko fa²-tzŭ
S. „ 个 „ „ ᶜsiang kuh fah-ᶜts
C. „ 出一條法子 ᶜsöng ch'ut₎ yat₎ ₍t'íú fát₀ ᶜtsz

Third

M. 第三 ti⁴ san¹
S. „ „ di⁾ san
C. „ „ tai² ₍sám

One ——

M. 三分之一 san¹ fên¹ chih i¹
S. „ „ „ „ san vung⁾ ts ih
C. „ „ „ „ ₍sam fan² ₍chi yat₎

Thirsty

M. 渴了 k'o³ lo
S. 口乾 ᶜk'eu koen
C. 頸渴 ᶜkeng† hot₀

Are you ——

M. 你渴不渴 ni³ k'o³ pu k'o³
S. 儂阿口乾否 nong a ᶜk'eu koen va⁾
C. 你頸渴唔頸渴呢 ₍néí ᶜkeng† hot₀ ₍m ᶜkeng† hot₀ ₍ni

This

M. 這 chê⁴; 這個 chê⁴ ko
S. 第 di⁾; 第个 di⁾ kuh
C. 呢個 ₍ni ko⁾

Those

M. 那 na⁴; 那些(個) na⁴ hsieh¹ (ko)
S. 伊 i; 伊个 i kuh
C. 個啲 ko⁾ ₀tí

Thousand

M. 千 ch'ien[1]
S. „ ts'ien
C. „ ˌts'ín

Thread

M. 線 hsien[4]
S. „ sien'
C. „ sín'

Threaten

M. 嚇呼 hsia[4] hu
S. „ hak
C. 恐嚇 ˋhung hákₒ

Three

M. 三 san[1]
S. „ san
C. „ ˌsám

Throat

M. 嗓子 sang[3]-tzŭ
S. 喉嚨 ˋoo long
C. „ „ ˌhaú ˌlung

Through

M. 從 ts'ung[2]; 打 ta[3]; 通 t'ung[1]; 過 kuo[4]
S. (1) dzong; (2) ˋtang; (3) t'ong; (4) koo'
C. (1) ˌts'ung; (2) ˋtá; (3) ˌt'ung; (4) kwo'

Pass —— here

M. 打這兒過 ta[3] chê[4] 'rh kuo[4]
S. 經過此地 kyung koo' ˋts' di'
C. „ „ 呢處 ˌking kwo' ˌni shü'

To pass through a city

M. 從城過 ts'ung[2] ch'êng[2] kuo[4]
S. 穿過城 ts'en koo' dzung
C. 經 „ „ ˌking kwo' ˌsheng*

To be wet ——

M. 濕透了 shih[1] t'ou[4] lo
S. „ „ sak t'eu'
C. „ „ shapˌ t'aú'

Throw

M. 扔 jêng[1]
S. 丟 tieu; 搥 teh
C. „ ˌtíú; 揨 ˌwing; 擗 p'ek$_2$†; 揕 ˋtam

To —— down

M. 扔下 jêng[1] hsia; 摔 shuai[1]
S. 摜 „ 去 gwan' ˋ'au chi'
C. 揨落 „ ˌwing lok$_2$ hui'

Thumb

M. 大拇指頭 ta[4] mu chih[2] t'ou
S. „ 指頭 doo' tsih deu
C. 手 „ 公 ˋshaú ˋchí ˌkung

Thunder

M. 雷 lei²
S. ,, le
C. ,, ˍlui

—— (vb.)

M. 打雷 ta³ lei²
S. 雷響 le ˁhyang
C. 打雷 ˁtá ˍlui

Thursday

M. 禮拜四 li³ pai⁴ ssŭ⁴
S. ,, ,, ,, ˁli paˀ sˀ
C. ,, ,, ,, ˍlai páiˀ szˀ

Tide

M. 潮水 ch'ao² shui³
S. ,, ,, dzau ˁs
C. ,, ,, ˍch'íú ˁshui

High ——

M. 潮滿 ch'ao² man³
S. ,, ,, dzau ˁmen
C. 水大滿流 ˁshui tái² ˁmún ˍlaú

Flood ——

M. 長潮 chang³ ch'ao²
S. ,, ,, tsangˀ dzau
C. 水大 ˁshui tái²

Ebb ——

M. 落潮 lo⁴ ch'ao²
S. ,, ,, lauh dzau
C. 水乾 ˁshui ˍkon

Tie

M. 綑 k'un³; 綁邦 pang³; 拴 shuan¹
S. (1) ˁkw'ung; (2) paung; 結 kyih
C. (2) ˁpong

To —— up animals

M. 拴牲口 shuan¹ shêng¹ k'ou³
S. 綑住中牲 ˁkw'ung dzuˀ tsong sang
C. (a cow) 吶牛 náiˀ ˍngaú; (a dog) 纊廣狗 k'wángˀ ˁkaú

To —— a knot

M. 繫個疙瘩 chi⁴ ko ko¹ ta; 打結 ta³ chieh²
S. (2) ˁtang kyih
C. (2) ˁtá kítₒ

Tight

M. 緊 chin³
S. ,, ˁkyung
C. ,, ˁkan

Tile

M. 瓦 wa³
S. ,, ˁngau
C. ,, ˁngá

Time

M. 時 shih²; 時候兒 shih² hou⁴ 'rh; 工夫 kung¹ fu
S. (1) z; 時候 z-'euˀ; (3) kong foo
C. (1) ˍshí; 時候 ˍshí haú²

At the appointed time

M. 届時 chieh[2] shih[2]
S. „ 期 kya˃ ji
C. „ „ kái˃ ˩k'éi

A long ——

M. 老大的工夫 lao[3] ta[4] ti kung[1] fu
S. 長遠 dzang ˥yoen
C. 好耐 ˥hò noi[2]

I have no ——

M. 我沒空兒 wo[3] mei[2] k'ung[4] 'rh
S. „ 無 „ 夫 ˥ngoo m k'ong˃ foo
C. „ 唔得閒 ˥ngo ˩m tak˩ ˩hán

The first ——

M. 頭一次 t'ou[2] i[1] tz'ŭ[4]
S. „ „ 回 deu ih we
C. „ „ 次 ˩t'aú yat˩ ts'z˃

How many times?

M. 多少回 to[1] shao[3] hui[2]
S. 好幾 „ ˥hau ˥kyi we
C. 幾多回 ˥kéi ˩to ˩wúi

What —— is it?

M. 幾下鐘 chi[3] hsia[4] chung[1]
S. „ 點 „ ˥kyi ˥tien tsong˃
C. „ „ „ 呢 ˥kéi ˥tím ˬchung ˩ni

To

M. (arrive at) 到 tao[4]; (towards) 往 wang[3]
S. (arrive at) (1) tau˃; (towards) 向 hyang˃
C. (arrive at) (1) tò˃; (towards) 向 höng˃

—— come —— the house

M. 到家裏來 tao[4] chia[1] li lai[2]
S. „ 屋 „ „ tau˃ ok ˥li le
C. 嚟到屋跕 ˩lai tò˃ uk˩ ˥k'éi

Tobacco

M. 煙 yen[1]
S. „ ien
C. „ ˬyín

To-day

M. 今天 chin[1] t'ien[1]
S. „ 朝 kyung tsau
C. „ 日 ˩kam yat˩

Toe

M. 脚指頭 chiao[3] chih[2] t'ou
S. „ „ „ kyak tsih deu
C. „ 趾 kokˬ ˥chí

To-morrow

M. 明天 ming[2] t'ien
S. „ 朝 ming tsau
C. 聽日 ˩t'ing yat˩

Tone

M. 聲 shêng[1]
S. ,, sung
C. ,, 音 ˌsheng† ˌyam

The first ——

M. 上平 shang[4] p'ing[2]
S. ,, ,, ˇzaung bing

The second ——

M. 下平 hsia p'ing[2]
S. ,, ,, ˇˇau bing

The third ——

M. 上聲 shang[3] shêng[1]
S. ,, ,, ˇzaung sung

The fourth ——

M. 去聲 ch'ü[4] shêng[1]
S. ,, ,, chi' sung

The entering ——

M. 入聲 ju[4] shêng[1]
S. ,, ,, zeh sung

The tones in Cantonese are the 9 book and colloquial tones :

The upper even 上平 shöng[2] ˇˇp'ing
The upper rising 上上 shöng[2] ˇshöng
The upper retiring 上去 shöng[2] hui'
The upper entering 上入 shöng[2] yap$_2$
The lower even 下平 há[2] ˇˇp'ing
The lower rising 下上 há[2] ˇshöng
The lower retiring 下去 há[2] hui'
The lower entering 下入 há[2] yap$_2$
The middle entering 中入 ˌchung yap$_2$

There is besides these a variant tone for each of the above called 變音 pín' ˌyam, the most important of which are those for the 上平, 下平, and 下去.

Tongue

M. 舌頭 shê[2] t'ou
S. ,, ,, zeh deu
C. 腩 léi[2]

To-night

M. 今晚 chin[1] wan[3]; 晚晌 wan[3] shang
S. ,, 夜 kyung ya'
C. (1) ˌkam ˇmán

Too

M. 太 t'ai[4]
S. 忒 t'uh
C. 太 t'ái'

—— **(also)**

M. 也 yeh[3]
S. ,, ˇˇa
C. 都 ˌˌtò ; 亦都 yik$_2$ ˌˌtò

Tool

M. 傢伙 chia[1] huo

S. ,, ,, kya ˁhoo

C. 器具 héi[3] kui[2]

Tooth

M. 牙 ya[2]

S. ,, nga; 牙齒 nga ˁts‘

C. ,, ˍngá

Toothache

M. 牙疼 ya[2] t‘êng[2]

S. ,, 齒痛 nga ˁts‘ t‘ong[3]

C. ,, 痛 ˍngá t‘ung[3]

Top

M. 頭 t‘ou[2]; 頂 ting[3]; 上面 shang[4] mien

S. (1) deu; (2) ˁting; (3) ˁzaung mien[3]

C. 頂頭 ˁteng† ˍt‘aú; (3) shong[2] mín[2]

The —— of a hill

M. 山頂 shan[1] ting[3]

S. ,, ,, san ˁting

C. ,, ,, ˍshán ˁteng†

Touch

M. 摸 mo[1]; 摩 mo[2]; 動 tung[4]

S. ,, mok; (3) ˁdong

C. 捵親 tím[3] ˍts‘an; (2) ˍmo

Tough

M. 硬 ying[4]; (meat) 老 lao[3]; (metal) 堅 chien[1]

S. (1) ngang[3]; (meat) (2) ˁlau; (metal) (3) kyien

C. 靭 yan[2]; (meat) 靭 yan[2]; (metal) 堅靭 ˍkín yan[2]

Towards

M. 向 hsiang[4]; 往 wang[3]

S. ,, hyang[3]

C. ,, höng[3]

To go —— the south

M. 往南邊去 wang[3] nan[2] pien[1] ch‘ü[4]

S. 向 ,, ,, ,, hyang nen pien chi[3]

C. ,, ,, 便 ,, höng[3] ˍnám pín[2] hui[3]

Towel

M. 手巾 shou[3] chin[1]

S. ,, ,, ˁseu kyung

C. 面 ,, mín[2] ₒkan

Tower

M. 樓 lou[2]

S. ,, leu

C. ,, ˍlaú*

—— **(pagoda)**

M. 塔 t‘a[3]; 臺 t‘ai[2]

S. ,, t‘ah; ,, de

C. ,, t‘áp₀

—— **over a city gate**

M. 門樓 mên[2] lou[2]

S. 敵 ,, dih leu

C. 城門樓 ˍsheng† ˍmún ˍlaú*

Town (walled)
M. 城 ch'êng²
S. „ dzung
C. „ ˌsheng †

Market ——
M. 鎮店 chên⁴ tien⁴
S. 市鎮 ˈz tsungˀ
C. 墟 ˌhui

Track
M. 印兒 yi(n)⁴ 'rh ; 踪跡 tsung¹ chi⁴
S. „ 踪 iung tsong; (2) tsong tsih
C. 脚跡 kökₒ tsikₔ

Cart ——
M. 車印兒 ch'ê¹ yi(n)⁴ 'rh
S. „ „ 子 ts'o iung-ˈts
C. „ „ ˌch'e yanˀ

Train (railway)
M. 火輪車 huo³ lun ch'ê¹
S. „ „ „ ˈhoo lung ts'o
C. „ 車 ˈfo ˌch'e

Tree
M. 樹 shu⁴
S. „ zuˀ
C. „ shü²

Trench
M. 溝 kou¹; 壕溝 hao² kou¹
S. „ keu; „ „ ha keu
C. 戰溝 chínˀ ˌkáú

Trench, a
M. 一道壕溝 i¹ tao⁴ hao² kou¹
S. „ 條 „ „ ih diau ha keu
C. „ „ 戰 „ yatₔ ˌt'íú chínˀ ˌkáú

Trot
M. 趟 tien¹
S. 小跑 ˈsiau bau
C. 跑花蹄 ˈp'áú ˌfá ˌt'ai

Trousers
M. 褲子 k'u⁴-tzŭ
S. „ „ k'ooˀ-ˈts
C. „ fúˀ

Truce
M. 免戰 mien³ chan⁴
S. „ „ ˈmien tsenˀ
C. „ „ ˌmín chínˀ

Flag of ——
M. 免戰旗 mien³ chan⁴ ch'i²
S. „ „ „ ˈmien tsenˀ ji
C. „ „ „ ˌmín chínˀ ˌk'éi

Truck
M. 大車 ta⁴ ch'ê¹
S. 貨 „ hooˀ ts'o
C. 鐵路貨車 t'ítₒ lò² foˀ ˌch'e

True
M. 眞 chên¹; 眞實 chên¹ shih²
S. (1) tsung; (2) tsung zeh
C. (1) ˌchan; (2) ˌchan shatₔ

Is it true?

M. 是眞的不是 shih⁴ chên¹ ti pu⁴ shih

S. 眞實否 tsung zeh va'

C. 係眞唔係呀 hai² ᶜchan ᶜm hai² á'

Try

M. 試 shih⁴; 試一試 shih⁴ i¹ shih⁴

S. (1) s'; 試試看 s' s' k'oen'

C. (1) shí'

To —— a case

M. 審案 shên³ an⁴

S. ,, ,, ᶜsung oen'

C. ,, ,, ᶜsham on'

Tuesday

M. 禮拜二 li³ pai⁴ êrh⁴

S. ,, ,, ,, ᶜli pa' nyi'

C. ,, ,, ,, ᶜlái pái' yí²

Turn

M. 轉 chuan³; 掉 tiao⁴

S. ,, ᶜtsen

C. ,, ᶜchün

—— (a wheel)

M. 擰 ning²

S. 旋 zien'

C. 擰 ning²

To —— the head

M. 扭過頭兒來 niu³ kuo t'ou² 'rh lai²

S. 回過頭來 we koo' deu le

C. 擰轉頭 ning² ᶜchün ᶜt'aú

To turn sour

M. 變酸 pien⁴ suan¹

S. ,, ,, pien' soen

C. ,, 爲酸 pín' wai² ᶜsün

To —— upside down

M. 倒過來 tao⁴ kuo lai

S. ,, 頭 ,, ᶜtau deu le

C. 顛倒 ᶜtín ᶜtò

To —— over

M. 翻過來 fan¹ kuo lai

S. ,, ,, ,, fan koo le

C. 反轉 ᶜfán ᶜchün

Twelve

M. 十二 shih² êrh⁴

S. ,, ,, zeh nyi'

C. ,, ,, shap₂ yí²

Twenty

M. 二十 êrh⁴ shih²

S. ,, ,, nyi' zeh

C. ,, ,, yí² shap₂

Two

M. 二 êrh⁴; 兩個 liang³ ko; 倆 lia³

S. ,, nyi'; ,, 个 ᶜliang kuh

C. ,, yí²; (2) ᶜlöng ko'

Umbrella

M. 傘 san³
S. ,, san˃
C. 遮 ˩che

—— **(rain)**

M. 雨傘 yü³ san³
S. ,, ,, ˈyui san˃
C. ,, 遮 ˧yü ˩che

Under

M. 下 hsia⁴; 在底下 tsai⁴ ti³ hsia
S. (1) ˈˈau; 拉底下 la˃ di˃ ˈˈau
C. (1) há²; 下底 há² ˈtai

—— **a tree**

M. 在樹底下 tsai⁴ shu⁴ ti³ hsia
S. 拉 ,, ,, ,, la˃ zu˃ di˃ ˈˈau
C. 樹下 shü² há²

—— **the water**

M. 在水裏 tsai⁴ shui³ li
S. 水下 ˈs ˈˈau
C. ,, ,, ˈshui há²

—— **the orders of**

M. 手下 shou³ hsia⁴; 屬下 shu³ hsia⁴
S. (1) ˈseu ˈˈau; (2) zok ˈˈau
C. (1) ˈshaú há²

Understand

M. 懂 tung³; 懂得 tung³ tê²; 明白 ming² pai²
S. (1) ˈtong; (2) ˈtong tuh; (3) ming bak
C. (3) ˧ming pák₂; 曉 ˈhíú

Hard to ——

M. 難懂 nan² tung³
S. ,, ,, nan ˈtong
C. ,, 曉 ˧nán ˈhíú

I —— your meaning

M. 我明白你的意思 wo³ ming² pai² ni³ ti i⁴-ssŭ
S. 我曉得儂个意思 ˈngoo ˈhyau tuh nong˃ kuh i˃ s˃
C. 我明白你嘅意思 ˈngo ˧ming pák₂ ˈnéi ke˃ yí˃ sz˃

Do you —— English?

M. 英國話你懂不懂 ying¹ kuo hua⁴ ni³ tung³ pu tung³
S. 儂懂英國話否 nong˃ ˈtong iung kok wo˃ va˃
C. 你曉英話唔曉呢 ˈnéi ˈhíú ˩ying wá²* ˧m ˈhíú ˩ni

Undress

M. 脫衣裳 t'o¹ i¹ shang
S. ,, ,, ,, t'oeh i zaung
C. ,, ,, ,, t'üt₀ ˩yí ˧shöng

United States of America

M. 美國 mei³ kuo
S. ,, ,, ᶜme kok
C. ,, ,, ᶜméi kwokₒ

Unjust

M. 不公道 pu⁴ kung¹ tao; 不公平 pu⁴ kung¹ pᶜing²
S. 勿公道 'veh kong dau⁾; 勿公平 'veh kong bing
C. 唔公道 ˏm ˏkung tò²

Until

M. 到 tao⁴
S. ,, tau⁾
C. ,, tò⁾; 至到 chí⁾ tò⁾

Up

M. 上 shang⁴
S. ,, ᶜzaung
C. ,, ᶜshöng

To get ——

M. 起來 chᶜi³ lai²
S. ,, ,, ᶜchi le
C. ,, 身 ᶜhéi ˏshan

To go —— a hill

M. 上山 shang⁴ shan¹
S. ,, ,, ᶜzaung san
C. ,, ,, ᶜshöng ˏshán

To bring ——

M. 養活 yang³ huo
S. ,, ,, ᶜyang weh
C. ,, ᶜyöng

Us

M. 我們 wo³ mên
S. ,, 侬 ᶜngoo nyi⁾
C. ,, 哋 ᶜngo téi²

Use

M. 用 yung⁴; 使喚 shih³ huan⁴
S. ,, yong⁾; 利用 li⁾ yong⁾
C. ,, yung²

To —— up

M. 用盡 yung⁴ chin⁴
S. ,, 完 yong⁾ wen
C. ,, 哋徙 yung² sái⁾

Useful

M. 有用處 yu³ yung⁴ chᶜu; 有益處 yu³ i² chᶜu
S. (2) ᶜyeu iuh tsᶜu⁾; 有用場 ᶜyeu yong⁾ dzang
C. 有用嘅 ᶜyaú yung² ke⁾

Useless

M. 不中用 pu⁴ chung¹ yung⁴; 沒用 mei²yung⁴; 使不得 shih³ pu⁴ tê⁴
S. 勿中用 'veh tsong yong⁾; 無用 m yong⁾
C. 冇用 ᶜmò yung²; 唔中用 ˏm ˏchung yung²; (3) ᶜshai pat, tak,

Valley

M. 山谷 shan[1] ku[3]
S. „ „ san kok
C. „ „ ˏshán kukˎ

Valuable

M. 貴重 kuei[4] chung[4]; 值錢 chih[2] ch'ien[2]
S. (1) kyui' ʿdzong; (2) dzuh dien; 寶貝 ʿpau pe'
C. (1) kwai' chung[2]; (2) chikˎ ˏts'ín*

Veal

M. 小牛肉 hsiao[3] niu[2] jou[4]
S. „ „ „ ʿsiau nyeu nyok
C. 牛仔 „ ˏngaú ʿtsai yukˎ

Vegetables

M. 菜 ts'ai[4]
S. „ ts'e'; 菜蔬 ts'e' soo
C. „ ts'oi'

Vein

M. 血管 hsieh[3] kuan[3]
S. „ „ hyoeh ʿkwen
C. 囘血管 ˏwúi hütₒ ʿkwún

Very

M. 很 hên[3]; 甚 shên[4]
S. 極 juh; 蠻 'man; 頂 ʿting
C. 好 ʿhò; 極 kikˎ

Not —— good

M. 不很好 pu[4] hên[3] hao[3]
S. 勿大 „ 'veh doo' ʿhau
C. 唔多 „ ˏm ₒto ʿhò

It is not very cold

M. 天不大冷 t'ien[1] pu ta[4] lêng[3]
S. „ 勿 „ „ t'ien 'veh doo' ʿlang
C. 唔係十分冷 ˏm haiˎ shapˎ ˏfan ˊláng

Village

M. 村子 ts'un[1]-tzŭ; 鄉村 hsiang[1] ts'un[1]
S. (2)hyang-ʿts'ung; 村 ʿts'ung
C. 村(鄉) ˏts'ün (ˏhöng)

A small ——

M. 庄子 chuang[1]-tzŭ
S. 小村庄 ʿsiau ʿts'ung tsəung
C. 村庄 ˏts'ün ˏchong

Violent

M. 利害 li[4] hai[4]; 猛烈 mêng[3] lieh[4]
S. (1) li' 'e'
C. (2) ˊmáng lítˎ; 兇惡 ˏhung okₒ

Visit

M. 拜 pai[4]; 拜會 pai[4] hui[4]
S. „ pa'; „ „ pa' we'
C. 探 t'ám'; 拜客 pái' hákₒ

To return a ——

M. 回拜 hui[2] pai[4]
S. „ „ we pa'
C. „ „ ˏwúi pái'

Visiting-card

M. 名片 ming[2] p'ien[4]
S. „ „ ming p'ien'
C. „ 帖 ˌming t'íp˳

Voice

M. 聲音 shêng[1] yin
S. „ „ sung iung
C. „ „ ˌsheng† ˌyam; 聲氣 ˌsheng† héi'

To speak in a low ——

M. 小聲說話 hsiao[3] shêng[1] shuo[1] hua[4]
S. 低 „ „ „ ti sung soeh wo'
C. „ „ 講 ˌtai ˌsheng† ˁkong

Voyage

M. 水路 shui[3] lu[4]
S. „ „ ˁs loo'
C. „ „ ˁshui lò[2]

Wade

M. 趟水 t'ang[1] shui[3]
S. 蹚 „ ban ˁs
C. 揹 „ káng' ˁshui

To —— across a river

M. 趟水過河 t'ang[1] shui[3] kuo[4] ho[2]
S. 蹚 „ „ „ ban ˁs kòo' ˁoo
C. 揹 „ „ „ káng' ˁshui kwo' ˌho

Waist

M. 腰 yao[1]
S. „ iau
C. „ ˌyíú

Wait

M. 等 têng[3]; 待 tai[4]
S. „ ˁtung; 等候 ˁtung 'eú'
C. „ ˁtang

—— a moment

M. 等一會兒 têng[3] i[1] hui[4] 'rh
S. „ „ 歇歇 ˁtung - ih hyih hyih
C. „ „ 吓 ˁtang yat˳ ˧há

—— three days more

M. 再等三天 tsai[4] têng[3] san[1] t'ien[1]
S. „ „ „ 日 tse' ˁtung san nyih
C. 等三日添 ˁtang ˁsam yat˳ ˌt'ím

—— till to-morrow

M. 等到明天 têng[3] tao[4] ming[2] t'ien[1]
S. „ „ „ 朝 ˁtung tau' ming tsau
C. „ „ 聽日 ˁtang tò' ˌt'ing yat˳

—— till he comes

M. 等他來 têng[3] t'a[1] lai[2]
S. „ 伊 „ ˁtung yi le
C. „ 佢嚟 ˁtang ˧k'ui ˌlai

To wait on

M. 服侍 fu shih[4]
S. „ „ vok ˁz
C. „ 事 fuk˩ sz[2]

Tell him to ——

M. 叫他等 chiao[4] t'a[1] têng[3]
S. „ 伊 „ kyau˃ yi ˁtung
C. „ 佢 „ kíú˃ ˧k'ui ˁtang

Wake (trans.)

M. 叫醒了 chiao[4] hsing[3] lo
S. „ „ kyau˃ sing
C. „ „ kíú˃ ˁseng†

—— (intrans.)

M. 醒 hsing[3]
S. „ sing
C. „ ˁseng†

Walk

M. 走 tsou[3]
S. „ ˁtseu
C. 行 ˩háng†

To —— slowly

M. 慢慢走 man[4] man[4] tsou[3]
S. „ „ „ man˃ man ˁtseú
C. „ „ 行 mán[2] mán[2]* ˩háng†

Unable to ——

M. 走不動 tsou[3] pu tung[4]
S. „ 勿 „ ˁtseu 'veh ˁdong
C. 唔行得 ˩m ˩háng† tak˩

Wall

M. 牆 ch'iang[2]
S. „ ziang
C. „ ˩ts'öng

The Great ——

M. 萬里長城 wan[4] li[3] ch'ang[2] ch'êng[2]
S. 萬里長城 van˃ ˁli dzang dzung
C. „ „ „ „ mán[2] ˁléi ˩ch'öng ˩sheng†

City ——

M. 城牆 ch'êng[2] ch'iang[2]
S. „ „ dzung ziang
C. „ 基 ˩sheng† ˩kéi

Want

M. 要 yao[4]
S. „ iau˃
C. „ yíú˃

What do you ——?

M. 你要什麼 ni[3] yao[4] shê(n)[2] mo
S. 儂 „ 啥 nong iau˃ sa˃
C. 你 „ 物野 ˧néí yíú˃ mat˩ ˧ye

I am in —— of money

M. 我缺銀子 wo[3] ch'üeh[1] yin[2] tzŭ
S. „ „ 少銀用 ˁngoo choeh ˁsau nyung yong˃
C. „ 要銀用 ˧ngo yíú˃ ˩ngan* yung[2]

War

M. 打仗 ta³ chang⁴; 戰 chan⁴
S. ,, ,, ʿtang tsangˀ; ,, tsenˀ
C. ,, ,, ʿtá chöngˀ; ,, chínˀ

To declare ——

M. 投戰書 t'ou² chan⁴ shu¹
S. ,, ,, ,, deu tsenˀ su
C. ,, ,, ,, ˌt'aú chínˀ ˌshü

Warm

M. 煖和 nuan³ huo
S. ,, 熱 ʿnoen nyih
C. ,, ˂nün

—— water

M. 温和水 wên¹ huo shui³
S. ,, 水 'wung ʿs
C. 煖 ,, ˂nün ʿshuí

The weather is ——

M. 天煖和 t'ien¹ nuan³ huo
S. ,, 熱 t'ien nyih
C. ,, 氣煖 ˌt'ín héiˀ ˂nün

Warn

M. 儆戒 ching³ chieh
S. ,, ,, ʿkyung kyaˀ
C. ,, ,, ʿking káiˀ (*or* káiˀ*)

Wash

M. 洗 hsi³
S. ,, ʿsi
C. ,, ʿsai

Waste

M. 妄費 wang⁴ fei⁴; 耗費 hao⁴ fei⁴
S. (1) 'waung fiˀ
C. 唯徙 sáiˀ; 費 faiˀ

To —— time

M. 浪費工夫 lang⁴ fei⁴ kung¹ fu¹
S. ,, ,, ,, ,, laungˀ fiˀ kong foo
C. 費去時日 faiˀ huiˀ ˌshí yat₂

Watch (vb.)

M. 看 k'an⁴; 看守 k'an⁴ shou³
S. (1) k'oen; 謹守 ʿkyung ʿseu
C. (1) ˌhon; (2) ˌhon ʿshaú

To —— over

M. 照管 chao⁴ kuan³
S. ,, ,, tsauˀ ʿkwen
C. 保護 ʿpò wúˀ; 保守 ʿpò ʿshaú

—— (noun)

M. 更 kêng¹, ching¹
S. ,, kang
C. ,, ˌkáng

The second —— (night)

M. 二更天 êrh⁴ ching¹ t'ien¹
S. ,, ,, ,, nyiˀ kang t'ien
C. ,, ,, yíˀ ˌkáng

Watch (timepiece)

M. 表 piao³
S. „ ˂piau
C. 鏢 ˳piú; 時辰鏢 ˂shí ˂shan ˳piú

Watchman

M. 打更的 ta³ ching¹ ti
S. 看夜个 k'oen ya˃ kuh
C. 打更佬 ˂tá ˂káng ˂lò

Water

M. 水 shui³
S. „ ˂s
C. „ ˂shui

Wave

M. 波浪 po¹ lang⁴
S. „ „ poo laung˃
C. „ „ ˂po long²

We

M. 我們 wo³ mên; 偺們 tsa² mên
S. „ 侬 ˂ngoo nyi˃
C. „ 哋 ˂ngo téi²

Weak

M. 輭弱 juan³ jo⁴
S. „ „ ˂nyoen zak; 懦弱 'noo zak
C. „ „ ˂yün yök₂

This tea is too ——

M. 這茶太淡 chê⁴ ch'a² t'ai⁴ tan⁴
S. 第个茶忒淡 di˃ kuh dzo t'uh dan˃
C. 呢哋的茶淡過頭 ˂ni ˳ti ˂ch'á ˂t'ám kwo˃ ˂t'aú

Wear (clothes)

M. 穿 ch'uan¹
S. „ ts'en
C. 着 chök₀

To —— a hat

M. 戴帽子 tai⁴ mao⁴-tzŭ
S. „ „ „ ta˃ mau˃-˂ts
C. „ „ táí˃ mò²*

Weather

M. 天 t'ien¹; 天氣 t'ien¹ ch'i
S. (1) t'ien; (2) t'ien chi˃
C. (1) ˂t'ín; (2) ˂t'ín héi˃

Fine ——

M. 晴天 ch'ing² t'ien¹
S. 好 „ ˂hau t'ien
C. „ „ ˂hò ˂t'ín; 天時晴和 ˂t'ín ˂shí ˂ts'ing wo²

Cloudy ——

M. 陰天 yin¹ t'ien¹
S. „ „ iung t'ien
C. „ „ ˂yam ˂t'ín

Wednesday

M. 禮拜三 li³ pai⁴ san¹
S. „ „ „ ˂li pa˃ san
C. „ „ „ ˂lai pái˃ ˂sám

Week

M. 禮拜 li³ pai⁴; 七天 ch'i¹ t'ien¹; 星期 hsing¹ ch'i

S. (1) ᶜli pa'; 七日 ts'ih nyih

C. (1) ᶜlai pái'; (3) ˌsing ˌk'éi

Weigh

M. 稱 ch'êng¹; 約 yao¹

S. „ ts'ung; 兌 de'

C. „ ch'ing'

To —— silver

M. 平銀子 p'ing² yin² tzŭ

S. „ „ „ bing nyung-ᶜts

C. „ 兌銀 ˌp'ing tui' ˌngan *

To —— meat

M. 稱肉 ch'êng¹ jou⁴

S. „ „ ts'ung nyok

C. „ „ ch'ing' yuk̚

Weighs two pounds

M. 有二斤重 yu³ êrh⁴ chin¹ chung⁴

S. „ „ „ „ ᶜyeu nyi' kyung ᶜdzong

C. 二磅重 yi² pong² ˌch'ung†

How much does it —— ?

M. 有多大分兩 yu³ to¹ ta⁴ fên⁴ liang³

S. 有幾化分兩 ᶜyeu ᶜkyi hau' vung' ᶜliang

C. 有幾重 ᶜyaú ᶜkéi ˌch'ung†; 幾多斤兩 ᶜkéi ₒto ˌkan ˌlöng

To weigh anchor

M. 起錨 ch'i³ mao²

S. „ „ ᶜchi mau

C. „ „ ᶜhéi ˌnáú

Weight

M. 分兩 fên liang³; 輕重 ch'ing¹ chung⁴

S. (1) vung' ᶜliang; (2) chung ᶜdzong

C. 重 ˌch'ung†; (2) ˌheng† ˌch'ung†

—— **(for scales)**

M. 法碼 fa² ma

S. „ „ fah ᶜmo

C. „ „ fát₀ ᶜmá

Well (adj.)

M. 好 hao³; 無恙 wu² yang⁴

S. „ ᶜhaú; 爽快 ᶜsaung kw'a'

C. „ ᶜhò

He is ——

M. 他好 t'a¹ hao³

S. 伊 „ yi ᶜhau

C. 佢 „ ˌk'ui ᶜhò

—— (noun)

M. 井 ching³

S. „ ᶜtsing

C. „ ᶜtseng†

West

M. 西 hsi¹

S. „ si

C. „ ˌsai

In the west

M. 在西邊 tsai[4] hsi[1] pien

S. 拉 ,, ,, la' si pien

C. 在 ,, tsoi[2] ˌsai

North ——

M. 西北 hsi[1] pei[3]

S. ,, ,, si pok

C. ,, ,, ˌsai pak,

—— of the river

M. 河西 ho[2] hsi[1]

S. ,, ,, 'oo si

C. ,, ,, ˌho ˌsai

—— ward

M. 往西 wang[3] hsi[1]

S. 向 ,, hyang' si

C. ,, ,, höng' ˌsai

Wet

M. 溼 shih[1]; 潮 ch'ao[2]

S. ,, sak; ,, dzau

C. ,, shap,

What?

M. 甚麼 shê(n)[2] mo

S. 啥 sa'

C. 邊 ˌpín; 乜 mat,

—— is that?

M. 那是甚麼 na[4] shih[4] shê(n)[2] mo

S. 伊个是啥 i kuh ˈz sa'

C. 個啲的係乜(野)呢 ko' ˌti hai[2] mat, (ˈye) ˌni

In what place?

M. 在什麼地方 tsai she(n)[2] mo ti[4] fang

S. 拉啥地方 la' sa' di' faung

C. 在邊(處) tsoi[2] ˌpin (shü')

In —— way?

M. 怎麼樣 tsê(n)[3] mo yang[4]

S. 啥法則 sa fah tsuh

C. 點樣 ˈtím yöng[2]*

Wheat

M. 麥子 mai[4]-tzŭ

S. ,, mak

C. ,, mak,

Wheel

M. 車輪子 ch'ê[1] lun[2]-tzŭ; 輪 lun[2]

S. ,, ,, ts'o lung; ,, lung

C. (2) ˌlun; 車轆 ˌch'e luk,

When?

M. 多噲 to[1] tsan; 甚麼時候兒 shê(n)[2] mo shih[2] hou 'rh

S. 啥時候 sa' z-'eu'; 幾時 ˈkyi z

C. 幾時 ˈkéi ˌshí

When does he return?

M. 他多嗜回來 t'a¹ to¹ tsan hui² lai²

S. 伊幾時回來否 yi ʿkyi z we le vaʾ

C. 佢幾時翻嚟呢 ʿk'ui ʿkéi ˌshí ˏfán ˌlai ˏni

Where?

M. 那裏 na³ li; 那兒 na³ 'rh

S. (1) ʿʿa ʿli; 啥地方 saʾ diʾ faung

C. 邊處 ˍpín shüʾ

—— is he going?

M. 他往那裏去 t'a¹ wang³ na³ li ch'ü⁴

S. 伊那裏去 yi ʿʿa ʿli chiʾ

C. 佢去邊處 ʿk'ui huiʾ ˍpin shüʾ

—— do you come from?

M. 你打那裏來 ni³ ta³ na³ li lai²

S. 儂從啥地方來 nongʾ dzongʾ saʾ diʾ faung le

C. 你係邊處嚟呢處呢 ʿnéi ʿhai ˍpin shüʾ ˌlai ˏni shüʾ ˏni

The place —— we live

M. 我們住的地方 wo³ mên chu⁴ ti ti⁴ fang

S. 我呢住个地方 ʿngoo nyi dzu' kuh diʾ faung

C. 我哋住個處 ʿngo téi² chü² koʾ shüʾ

Wherever

M. 不論那兒 pu⁴ lun⁴ na³ 'rh; 不拘甚麼地方 pu⁴ chü¹ shê(n)² mo ti⁴ fang

S. 勿論啥地方 'veh lungʾ saʾ diʾ faung

C. 唔論邊處 ˍm lun² ˍpin shüʾ

Whether

M. 或 huo⁴ (but generally left untranslated)

S. ,, ʿok; 或是 ʿok ʿz

C. 不論 pat, lun²

—— or not

M. 是否 shih⁴ fou³

S. ,, 勿是 ʿz 'veh ʿz

C. ,, 否 shí² ʿfaú

Which?

M. 那一個 na³ i¹ ko⁴

S. ,, 裏一个 ʿʿa ʿli ih kuh

C. 邊個 ˍpín koʾ

While

—— it is raining

M. 下雨的時候 hsia⁴ yü³ ti shih² hou

S. 落雨个時候 lauh ʿyui kuh z-'euʾ

C. 落緊雨呢陣時 lok₂ ʿkan ˏyü ˌni chan² ˏshí

Not worth while

M. 不值 pu⁴ chih²
S. 勿 ,, 'veh dzuh
C. 不可以有益 pat˩ ᶜho ᶜyí ᶜyaú yik˩

Whip

M. 鞭子 pien¹-tzŭ
S. ,, ,, pien-ᶜts
C. ,, ˩pín

White

M. 白 pai²
S. ,, bak
C. ,, pák˩

Who?

M. 誰 shui²
S. 啥人 saᵓ nyung
C. 邊個 ˩pin koᵓ; 乜人 mat˩ ˩yan*

—— is he?

M. 他是誰 tʻa¹ shih⁴ shui²
S. 伊 ,, 啥人 yi ᶜz saᵓ nyung
C. 佢係乜誰 ᶜkʻui hai² mat˩ ˩shui*

It is he —— did it

M. 是他做的 shih⁴ tʻa¹ tso⁴ ti
S. ,, 伊 ,, 个 ᶜz yi tsooᵓ kuh
C. 係佢做 hai² ᶜkʻui tsò²

Whole

M. 全 chʻüan²
S. ,, dzien; 完全 wen dzien
C. ,, ˩tsʻün; 成 ˩sheng†

The —— family has been ill

M. 一家子全病了 yi¹ chia¹-tzŭ chʻüan² ping⁴ lo
S. 滿門全病 ᶜmen mung dzien bing
C. 全家係有病 ˩tsʻün ˩ká hai² ᶜyaú peng²†

The —— body

M. 渾身 hun² shên¹
S. ,, ,, wung sung
C. —— ,, yat˩ ˩shan; 全身 ˩tsʻün ˩shan

The —— day

M. 整天 chêng³ tʻien¹
S. ,, 日 tsong nyih
C. 成 ,, ˩sheng† yat˩

The —— room

M. 滿屋子 man³ wu¹-tzŭ
S. ,, 房間 ᶜmen vaung kan
C. 成間房 ˩sheng† ˩kán ˩fong*

The —— way

M. —路 i¹ lu⁴
S. 齊 ,, zi looᵓ
C. —— ,, yat˩ lò²

Why?

M. 爲甚麼 wei⁴ shê(n)² mo

S. „ 啥 we˒ sa˒

C. 點解 ᶜtím ᶜkái; 做乜 tso² mat˩; 爲乜事 wai² mat˩ sz²

That is ——

M. 因爲這個 yin¹ wei⁴ chê⁴ ko

S. „ „ 伊个 iung we˒ i kuh

C. „ 此之故 ˩yan ᶜts'z ˩chí kwú˒

Wide

M. 寬 k'uan¹; 廣 kuang³

S. 濶 kw'eh

C. „ fút˳

The river is very ——

M. 河狠寬 ho² hên³ k'uan¹

S. „ 極濶 'oo juh kw'eh

C. „ 好 „ ˩ho ᶜhò fút˳

Widow

M. 寡婦 kua³ fu

S. „ „ ᶜkwo voo˒

C. „ „ ᶜkwá ˧fú; 寡母婆 ᶜkwá ˧mò ˩p'o

Wife

M. 妻 ch'i¹; 媳婦兒 hsi² fu⁴ 'rh

S. „ ts'i; 娘子 nyang ᶜts

C. „ ˩ts'ai

Wild

M. 野 yeh³

S. „ ᶜya

C. „ ˧ye

—— **beasts**

M. 野獸 yeh³ shou⁴

S. „ „ ᶜya seu˒

C. „ „ ˧ye shaú˒

—— **country**

M. 曠野地方 k'uang⁴ yeh³ ti⁴ fang¹

S. „ „ „ „ kwaung ᶜya di˒ faung

C. „ „ „ „ k'wong˒ ˧ye téi² ˩fong

Will (noun)

M. 心 hsin¹; 心志 hsin¹ chih⁴

S. (1) sing; (2) sing ts˒; 主意 ᶜtsu i˒

C. 志意 chí˒ yí˒

Willing

M. 願意 yüan⁴ i⁴; 肯 k'ên³; 甘心 kan¹ hsin¹

S. (1) nyoen˒ i˒; (2) ᶜk'ung; (3) ken sing; 情願 dzing nyoen˒

C. (2) ᶜhang; 中意 ˩chung yí˒; (3) ˩kom ˩sam

Win

M. 勝 shêng⁴

S. „ sung˒

C. „ shing˒

To win a battle

M. 打勝仗 ta³shêng⁴chang⁴
S. ,, ,, ,, ᶜtang sung' tsang'
C. ,, ,, ,, ᶜtá shing' chöng'

—— (a game)

M. 贏 ying²
S. ,, yung
C. ,, ₍yeng†

Wind

M. 風 fêng¹
S. ,, fong
C. ,, ₍fung

A head ——

M. 頂風 ting³ fêng¹
S. 逆 ,, nyuh fong
C. 頂頭風 ᶜting ₍t'aú ₍fung; 逆風 ngák₂ ₍fung

To —— up (a watch)

M. 上絃 shang⁴ hsien²
S. 開 k'e
C. 上鏈 ᶜshöng ₍lín*

Window

M. 窗戶 ch'uang¹ hu
S. ,, 子 ts'aung-ᶜts
C. ,, 門 ₍ch'öng ₍mún

Wine

M. 酒 chiu³
S. ,, ᶜtsieu
C. ,, ᶜtsaú

Wing

M. 翅兒 ch'ih⁴ 'rh; 翅膀兒 ch'ih⁴ pang³ 'rh
S. 翼翎 kyi' lih
C. 翼 yik₂

Left —— (of an army)

M. 左翼 tso³ i⁴
S. ,, ,, tsi' yuh
C. ,, ,, ᶜtso' yik₂; 左畸 ᶜtso ₍k'éi

Winter

M. 冬天 tung¹ t'ien¹
S. ,, ,, tong t'ien
C. ,, ,, ₍tung ₍t'ín

Wire

M. 絲 ssŭ¹; 線 hsien⁴
S. ,, s; ,, sien'
C. (2) sín'

Telegraph ——

M. 電線 tien⁴ hsien⁴
S. ,, ,, dien' sien'
C. ,, ,, tín² sín'

Wireless (telegraphy)

M. 無線電報 wu² hsien⁴ tien⁴ pao⁴
S. ,, ,, ,, ,, m sien' dien' pau'
C. 冇 ,, ,, ,, ᶜmo sín' tín² pò'

Wise

M. 有智着 yu³ chih⁴ chao; 明白 ming² pai²

S. 智 ts'; 有智慧 ʿyeu ts' we'

C. „ chí'; „ „ „ ʿyaú chí' wai²

—— (prudent)

M. 謹慎 chin³ shên⁴

S. „ „ kyung' zung'

C. „ „ ʿkan shan²

Wish

M. 願意 yüan⁴ i⁴; 要 yao⁴

S. „ „ nyoen' i'; „ iau'

C. „ yün²

He does not —— to come

M. 他不願意來 t'a¹ pu yüan⁴ i lai²

S. 伊勿願意來 yi 'veh nyoen' i' le

C. 佢唔願嚟 ʿk'ui ˌm yün² ˌlai

With

M. 和 ho²; 同 t'ung²; 跟 kên¹

S. (1) ʿoo; (2) dong; 與 yui

C. (2) ˌt'ung

I am going —— you

M. 我同你去 wo³ t'ung² ni³ ch'ü⁴

S. 我搭儂一淘去 ʿngoo tah nong' ih dau chi'

C. 我同你去 ʿngo ˌt'ung ʿnéi hui'

To hit —— a stick

M. 使棍子打 shih³ kun⁴-tzŭ ta³

S. 用 „ „ „ yong' ʿkwung-ʿts ʿtang

C. 俾條棍打 ʿpéi ˌt'íú kwan' ʿtá

Come —— me

M. 你跟我來 ni³ kên¹ wo³ lai²

S. 儂 „ „ „ nong kung ʿngoo le

C. 同我去 ˌt'ung ʿngo hui'

Without

M. 沒 mei²; 沒有 mei² yu³; 非 fei¹

S. 無沒 m meh; (3) fi

C. 冇 ʿmò

—— that it cannot be done

M. 非那個不行 fei¹ na⁴ ko pu⁴ hsing²

S. 非伊个做勿來 fi i kuh tsoo' 'veh le

C. 冇此則不能成 ʿmò ʿts'z tsak, pat, ˌnang ˌshing

Witness

M. 證見 chêng⁴ chien

S. ,, ,, tsung⁵ kyien⁵; 干證 koen tsung⁵

C. 證人 ching⁵ ˏyan

To bear ——

M. 做證見 tso⁴ chêng⁴ chien

S. ,, ,, ,, tsoo⁵ tsung⁵ kyien⁵

C. ,, ,, tsò² ching⁵

Wolf.

M. 狼 lang²

S. ,, laung

C. 豺狼 ˏch'ái ˏlong

Woman

M. 女人 nü³ jên²

S. ,, ,, ˋnyui nyung

C. ,, ,, ˋnui ˏyan*

Wood

M. 木頭 mu⁴ t'ou

S. ,, ,, mok ˋdeu

C. ,, muk₂

—— **(trees)**

M. 樹林子 shu⁴ lin²-tzŭ

S. ,, ,, zu⁵ ling

C. ,, ,, shü² ˏlam

Wool

M. 羊毛 yang² mao²

S. ,, ,, yang mau

C. ,, ,, ˏyöng ˏmò

Woollen

M. 羊毛做的 yang² mao² tso⁴ ti

S. ,, ,, ,, 个 yang mau tsoo⁵ kuh

C. 絨 ˏyung*

Word

M. 話 hua⁴; 言 yen²; (written) 字 tzŭ⁴

S. (1) wo⁵; (2) yien; (written) (3) z⁵

C. (1) wá²; 話頭 wá² ˏt'aú; (2) ˏyín; (written) (3) tsz²

To break one's ——

M. 失信 shih¹ hsin⁴

S. ,, ,, seh sing⁵

C. ,, 口齒 shat₂ ˋhaú ˋch'í; 食言 shík₂ ˏyín

Work

M. 工 kung¹; 工夫 kung¹ fu¹

S. (2) kong foo

C. (1) ˏkung; (2) ˏkung ˏfú

To —— (manual labour)

M. 做活 tso⁴ huo²

S. ,, 工 tsoo⁵ kong

C. ,, ,, tsò² ˏkung

World

M. 世界 shih⁴ chieh; 地球 ti⁴ ch'iu²

S. (1) s⁵ ka⁵; (2) di⁵ jeu

C. (1) shai⁵ kái⁵; (2) téi² ˏk'aú

The whole world

M. 普天下 p'u³ t'ien¹ hsia⁴
S. ,, ,, ,, p'oo t'ien ᶜau
C. ,, ,, ,, ᶜp'ò ˌt'ín há²

Worm

M. 虫子 ch'ung²-tzŭ
S. ,, dzong
C. ,, ˌch'ung

Worse

M. 更不好 kêng⁴ pu⁴ hao³
S. ,, 勿 ,, kung⁾ 'veh ᶜhau
C. ,, 弊 kang⁾ pai²

Worth (noun)

M. 價值 chia⁴ chih²
S. 值價 dzuh ka⁾
C. 值 chikˌ

Not ——

M. 不值得 pu⁴ chih² tê
S. 勿 ,, 个 'veh dzuh kuh
C. 唔值 ˌm chikˌ

Wound

M. 傷 shang¹
S. ,, saung
C. ,, ˌshöng

To ——

M. 打傷 ta³ shang¹
S. ,, ,, ᶜtang saung
C. ,, ,, ᶜtá ˌshöng

To receive a wound

M. 受傷 shou⁴ shang¹
S. ,, ,, ᶜzeu saung
C. ,, ,, shaú² ˌshöng

Wounded

M. 受傷的 shou⁴ shang¹ ti
S. ,, ,, 个 ᶜzeu saung kuh
C. ,, ,, shaú² ˌshöng

Mortally ——

M. 打的死傷 ta³ ti ssŭ³ shang¹
S. 致命傷 ts⁾ ming⁾ saung
C. 受傷致死 shaú² ˌshöng chi⁾ ᶜsz

Wreck

M. 破船 p'o⁴ ch'uan²; 沉船 ch'ên² ch'uan²
S. (1) p'oo⁾ zen; (2) dzung zen
C. 船受破損 ˌshün shaú² p'ò⁾ ᶜsün

Wreckage

M. 沉船木料 ch'ên² ch'uan² mu⁴ liao³
S. ,, ,, ,, ,, dzung zen mok liau⁾
C. 船破爛之物 ˌshün p'o⁾ lán² ˌchí matˌ

Wrist

M. 手腕子 shou³ wan⁴-tzŭ
S. ,, ,, ᶜseu ᶜ'wen
C. ,, ,, ᶜshaú ᶜwún; 手眼骨 ᶜshaú ᶜngán kwatˌ

Write

M. 寫 hsieh³
S. „ ʿsia
C. „ ʿse

To —— a letter

M. 寫信 hsieh³ hsin⁴
S. „ „ ʿsia sing'
C. „ „ ʿse sun'

To learn to ——

M. 學寫字 hsüeh² hsieh³ tzŭ⁴
S. „ „ „ ʻauh ʿsia z'
C. „ „ „ hok₂ ʿse tsz²

To —— out a list

M. 開單子 kʻai¹ tan¹-tzŭ
S. „ „ „ kʻe tan-ʿts
C. „ „ ˌhoi ˌtán

Wrong

M. 錯 tsʻo⁴
S. „ tsʻo
C. „ tsʻo'

You are ——

M. 你錯了 ni³ tsʻo⁴ lo
S. 儂 „ 哉 nong tsʻo tse
C. 你 „ 咯 ˌnéi tsʻo' lokₒ

Yacht

M. 游歷船 yu² li⁴ chʻuan²
S. „ „ „ yeu li zen
S. „ 樂小舟 ˌyaú lok₂ ʿsíú ˌchaú

Yard

M. 院子 yüan⁴-tzŭ; 廠子 chʻang³-tzŭ
S. 天井 tʻien ʿtsing; 塲 dzang
C. „ „ ˌtʻín ʿtseng†

Timber ——

M. 木廠 mu³ chʻang³
S. „ 塲 mok dzang
C. „ 廠 muk₂ ʿchʻong

Year

M. 年 nien²
S. „ nyien
C. „ ˌnín

—— (of age)

M. 歲 sui⁴
S. „ soe'
C. „ sui'

This ——

M. 今年 chin¹ nien
S. „ „ kyien nyien
C. „ „ ˌkam ˌnín

Last ——

M. 去年 chʻü⁴ nien
S. 舊 „ jeu' nyien
C. 去 „ hui' ˌnín; 舊年 kaú² ˌnín

Next ——

M. 明年 ming² nien
S. „ „ ming nyien
C. „ „ ˌming ˌnín; 出年 chʻut₂ ˌnín

A good year (for farmers)
M. 好年頭 hao³ nien² t'ou²
S. ,, ,, ,, hau˃ nyien ˂deu
C. ,, ,, ,, ˂hò ˍnín ˍt'aú

Yellow
M. 黃 huang²
S. ,, waung
C. ,, ˍwong

Yes
M. 是 shih⁴; 不錯 pu² ts'o⁴
S. ,, ˂z; 勿錯 'veh ts'o
C. 係 hai²

Yesterday
M. 昨天 tso² t'ien
S. ,, 日 zauh nyih
C. ,, ,, tsok₂ yat₂

The day before ——
M. 前天 ch'ien² t'ien
S. ,, 日 zien nyih
C. ,, ,, ˍts'ín yat₂

Yet
M. 還 hai²
S. ,, wan
C. 尚 shöng²

—— (nevertheless)
M. 然而 jan êrh
S. ,, ,, zen r
C. 仍然 ˍyíng ˍyín

Not come yet
M. 還沒來 hai² mei² lai²
S. 勿曾 ,, 'veh zung le
C. 未 ,, 嚟 méi² ˍts'ang ˍlai

There are more ——
M. 還有 hai² yu³
S. ,, ,, wan ˂yeu
C. 重 ,, chung² ˂yaú

Although . . . ——
M. 雖然 . . . 也 sui¹ jan² . . . yeh³
S. ,, ,, . . . ,, soe zen . . . ˂˃a
C. ,, ,, . . . 重 ˍsui ˍyín . . . chung²

You
M. 你 ni³
S. 儂 nong˃; 倷 na˃
C. 你 ˂néi

—— (plural)
M. 你們 ni³ men
S. 儂倷 nong˃ na˃
C. 你哋 ˂néi téi²

—— (more politely)
M. 您 nin²; 閣下 ko² hsia
S. (2) kuh ˂˃au ; 先生 sien sang
C. (2) kokₒ há²

Young

M. 小 hsiao³; 年輕的 nien² ch'ing¹ ti

S. (1) ˂siau ; 年紀輕 nyien kyi˃ chung

C. 後生 haú² ˌsháng ; 細 sai˃

Your

M. 你的 ni³ ti ; 你們的 ni³ mên ti ; 您的 nin²ti

S. 儂个 nong˃ kuh ; 伲个 na˃ kuh

C. 你嘅 ˂néi ke˃; 你ㄇ的 ˂néi ˳ti

PHRASES, QUESTIONS AND ANSWERS

Time and Place

Where is?

M. 在那兒 (*or* 那裏) tsai^{4} na^{3} 'rh (*or* na^{3}-li)

S. 拉 „ 裏 la^{2} ^{c}a ^{c}li

C. 𠊎係邊處 ^{c}hai $_{o}$pín shü^{2}

Where are they?

M. 他們在那兒 (*or* 那裏) t'a^{1}-mên tsai^{4} na^{3} 'rh (*or* na^{3}-li)

S. 伊拉拉 „ 裏 yi la^{2} la^{2} ^{c}a ^{c}li

C. 佢𠊎地𠊎係邊處呢 ^{c}k'ui téi^{2} ^{c}hái $_{o}$pín shü^{2} $_{c}$ni

They are here.

M. 他們在這兒 (*or* 這裏) t'a^{1}-mên tsai^{4} chê^{4} 'rh (*or* chê^{4}-li)

S. 伊拉此地 yi la^{2} ^{c}ts' di^{2}

C. 佢𠊎地𠊎係呢處 ^{c}k'ui téi^{2} ^{c}hai $_{c}$ni shü^{2}

He is not here.

M. 他不在這兒 (*or* 這裏) t'a^{1} pu tsai^{4} chê^{4} 'rh (*or* chê^{4}-li)

S. 伊勿拉此地 yi 'veh la^{2} ^{c}ts' di^{2}

C. 佢唔𠊎係呢處 ^{c}k'ui $_{c}$m ^{c}hai $_{c}$ni shü^{2}

Where are you going?

M. 你上那兒去 ni^{3} shang^{4} na^{3} 'rh ch'ü^{4}

S. 儂到 „ 裏 „ nong^{2} tau^{2} ^{c}a ^{c}li chi^{2}

C. 你而家去邊處呢 ^{c}néi $_{c}$yí $_{o}$ká hui^{2} $_{o}$pín shü^{2} $_{c}$ni

Where have you come from?

M. 你打那兒來 ni³ ta³ na³ 'rh lai²

S. 儂從 „ 裏 „ nong˃ dzong ˂'a ˂li le

C. 你由邊處嚟呢 ˂néi ˧yaú ˩pín shü˃ ˧lai ˧ni

I am going home.

M. 我回家 wo³ hui² chia¹

S. „ 到屋裏去 ˂ngoo tau˃ ok ˂li chi˃

C. „ 而家翻 „ 歸 ˂ngo ˧yí ˩ká ˧fán hui˃ ˧kwai

We have come from home.

M. 我們打家裏來了 wo³-mên ta³ chia¹ li lai² lo

S. „ 侬從屋 „ „ ˂ngoo nyi˃ dzong ok ˂li le

C. „ 哋由 „ 踫嚟 ˂ngo téi² ˧yaú uk, ˂k'éi ˧lai

Come up.

M. 上來 shang⁴ lai

S. „ „ ˂zaung le

C. „ 嚟 ˂shöng ˧lai

Go down.

M. 下去 hsia⁴ ch'ü

S. „ „ ˂'au chi˃

C. 落 „ lok₂ hui˃

Turn to the right (left).

M. 右(左)邊走 yu⁴ (tso³) pien¹ tsou³

S. „ („) „ 轉 yeu˃ (tsi˃) pien ˂tsen

C. 轉翻右(左)手 ˂chün ˧fán yaú² (˂tso) ˂shaú

Stand still there.

M. 站住 chan⁴ chu⁴

S. 立定 lih ding˃

C. 企個處 ˂k'éi ko˃ shü˃

Wait for me.

M. 等我 têng^{3} wo^{3}

S. „ „ 來 ʿtung ʿngoo le

C. „ „ 嚟 ʿtang ʿngo ˌlai

Come with me.

M. 跟我來 kên^{1} wo^{3} lai^{2}

S. 搭 „ 一淘來 tah ʿngoo ih dau le

C. 同 „ 嚟 ˌtʿung ʿngo ˌlai

Go away.

M. 去罷 chʿü^{4} pa

S. „ „ chi˒ ba

C. 扯咯 ʿchʿe lok˳

In which direction?

M. 向那裏去了 hsiang^{4} na^{3} li chʿü^{4} lo; 往那邊 wang^{3} na^{3} pien^{1}

S. 向那裏一面 hyang˒ ʿʿa ʿli ih mien˒

C. „ 邊頭 höng˒ ˳pín ˌtʿaú

In that direction.

M. 往那邊 wang^{3} na^{4} pien^{1}

S. 到伊个路 tau˒ i kuh loo˒

C. 向個頭 höng˒ ko˒ ˌtʿaú

How far is it?

M. 有多遠 yu^{3} to^{1} yüan^{3}

S. 幾化 „ ʿkyi hau˒ ʿyoen

C. 有幾 „ ʿyaú ʿkéi ʿyün

It is not far.

M. 不遠 pu^{4} yüan^{3}

S. 勿 „ ʾveh ʿyoen

C. 冇幾遠 ʿmò ʿkéi ʿyün

Two hours' distance.

M. 遠兩點鐘的工夫 yüan^{3} liang^{3} tien^{3} chung^{1} ti kung^{1}-fu

S. 兩點鐘个路程 ˁliang ˁtien tsong kuh looˀ dzung

C. „ „ „ 咁遠路 ˧löng ˁtím ˌchung komˀ ˧yün lòˀ

When will he come?

M. 他多嗜來 t'a^{1} to^{1}-tsan lai^{2}

S. 伊啥時候來 yi saˀ z-'euˀ le

C. 佢幾 „ 嚟呢 ˧k'ui ˁkéi ˧shí ˧lai ˌni

At what o'clock?

M. 甚麼時候兒來 shê(n)^{2}-mo shih^{2}-hou 'rh lai^{2}

S. 幾點鐘 ˁkyi ˁtien tsong

C. „ „ „ ˁkéi ˁtím ˌchung

At six o'clock.

M. 六點鐘來 liu^{4} tien^{3} chung^{1} lai^{2}

S. 拉六點鐘 laˀ lok ˁtien tsong

C. 六點 luk$_{2}$ ˁtím

In the morning.

M. 早起 tsao^{3}-ch'i (*pron.* tsao^{2}-ch'i)

S. „ 晨 ˁtsau zung

C. 朝頭早個時 ˌchíú ˧t'aú ˁtsò koˀ ˧shí

At noon.

M. 晌午 shang^{3}-wu (*pron.* shang^{1}-hu)

S. 日中 nyih tsong

C. 晏晝個時 ánˀ chaúˀ koˀ ˧shí

In the evening.

M. 晚上 wan^{3}-shang^{4}

S. 夜快 yaˀ k'waˀ

C. 挨晚個時 ˌái ˧mán koˀ ˧shí

Very early.

M. 大清早 ta[4] ch'ing[1] tsao[3]

S. 老早 ʿlau ʿtsau

C. 好 „ ʿhò ʿtsò

It is late.

M. 天晚了 t'ien[1] wan[3] lo

S. 時候晏拉哉 z-'eu' an' la' tse

C. 係夜咯 hai[2] ye[2] lok꜀

How often?

M. 多少回 to[1]-shao[3] hui[2]

S. 幾回 ʿkyi we

C. „ 多冚 ʿkei ˌto ˍwúi

What time is it?

M. 幾點鐘 chi[3] tien[3] chung, *or* 甚麼時候兒 shê(n)[2]-mo shih[2]-hou 'rh

S. (1) ʿkyi ʿtien tsong; 啥時候 sa' z-'eu'

C. 幾點鐘呀 ʿkéi ʿtím ˌchung á[2]

Weather

What will the weather be to-day?

M. 今天天氣怎麼樣 chin-t'ien[1] t'ien[1]-ch'i tsê(n)[3]-mo yang[4]

S. 今朝天氣那能 kyung tsau t'ien chi' na' nung

C. „ 日 „ 時點呢 ˍkam yatˍ (*or* matˍ) ˍt'ín ˍshí ʿtím ˍni

Very fine.

M. 很晴的天 hên[3] ch'ing[2] ti t'ien[1]

S. 天晴 t'ien dzing

C. 十分好天 shapˍ ˍfan ʿhò ˍt'ín

Bad, cloudy, foggy weather.

M. 天氣不好 t'ien^{1}-ch'i pu^{4} hao^{3}; 陰天 yin^{1} t'ien^{1}; 下霧 hsia^{4} wu^{4}

S. 天忡 t'ien cheu ; (2) iung t'ien ; 有霧露 ʿyeu ʻooˀ looˀ

C. 唔好天 ˏm ʿhò ˏt'ín ; (2) ˏyam ˏt'ín ; 有雲霧 ʿyaú ˏwan mòˀ

It is snowing on the mountains.

M. 山上下雪 shan^{1} shang hsia^{4} hsüeh^{3}

S. „ „ 落 „ san laungˀ lauh sih

C. „ „ „ „ ˏshán shöngˀ lokˏ süt$_{o}$.

The Road

Where does this road go ?

M. 走這股道往那兒去 tsou^{3} chê^{4} ku^{3} tao^{4} wang^{3} na^{3} 'rh ch'ü^{4}

S. 第條路到那裏 diˀ diau looˀ tauˀ ʿʿa ʿli

C. 呢 „ „ 去邊呢 ˏni ˍt'íú lòˀ huiˀ ₒpín ˏni

Does this road go to —— ?

M. 走這股道往 . . . 去麼 tsou^{3} chê^{4} ku^{3} tao^{4} wang . . . ch'ü^{4} mo

S. 第條路通到 . . . 否 diˀ diau looˀ t'ong tauˀ . . . vaˀ

C. 呢 „ „ 係去 . . . 唔係呢 ni ˍt'íú lòˀ haiˀ huiˀ . . . ˍm haiˀ ˏni

Which road goes to —— ?

M. 上 . . . 走那條路 shang^{4} . . . tsou^{3} na^{3} t'iao lu^{4}

S. 那裏一條路到 . . . 去 ʿʿa-ʿli ih diau looˀ tauˀ . . . chiˀ

C. 邊條路去 . . . ₒpín ˍt'íú lòˀ huiˀ . . .

Which is the shortest way ?

M. 是那條路近 shih^{4} na^{3} t'iao lu^{4} chin^{4}

S. 那裏一條路頂近 ˇa-ˇli ih diau looˀ ˇting ˇjung

C. 打邊條路去係至近呢 ˇtá ˌpín ˏt'íú lòˀ huiˀ haiˀ chíˀ ˇk'an ˏni

Is it safe on the road ?

M. 道路妥當不妥當 tao^{4}-lu^{4} t'o^{3}-tang^{1} pu t'o^{3}-tang^{1}

S. 路上 „ „ 勿 „ „ looˀ laungˀ ˇt'oo taungˀ 'veh ˇt'oo taungˀ

C. 呢條路有乜危險冇呀 ˏni ˏt'íú lòˀ ˇyaú mat, ˏngai ˇhím ˇmò á

How many hours is it to —— ?

M. 上...走得幾點鐘的工夫 shang^{4} . . . tsou^{3} tei^{3} chi^{3} tien^{3} chung^{1} ti kung^{1}-fu

S. 到...要幾點鐘工夫 tauˀ . . . iauˀ ˇkyi ˇtien tsong kong-foo

C. 要幾多點鐘至行得到 . . . yíúˀ ˇkéi ˌto ˇtím ˌchung chíˀ ˏháng tak, tòˀ . . .

Take me to ——

M. 你帶我上 . . . ni^{3} tai^{4} wo^{3} shang^{4} . . .

S. 儂領 „ 到 . . . nongˀ ˇling ˇngoo tauˀ . . .

C. 帶我去 . . . táiˀ ˇngo huiˀ . . .

Where is there drinking water on this road ?

M. 走這股道那兒有甜水 tsou^{3} che^{4} ku^{3} tao^{4} na^{3} 'rh yu^{3} t'ien^{2} shui^{3}

S. 走第條路啥地方有淡水 ˇtseu diˀ diau looˀ saˀ diˀ faung ˇyeu dan ˇs

C. 若運呢條路去邊處有水合人飲 yök, wanˀ ˏni ˏt'íú ˏlòˀ huiˀ ˌpín shüˀ ˇyaú ˇshui hop, ˏyan ˇyam

Is it only a mule road?

M. 這不過是個山道麼 chê⁴ pu kuo⁴ shih⁴ ko shan¹ tao⁴ mo

S. 第个只是一條山路否 di⁾ kuh tsuh ᶜz ih diau san loo va⁾

C. 呢條路不過係合驢行咩 ˌni ˍtʻíú lò² pat˩ kwo⁾ hai² hop˩ ˍlui ˍháng† ˌmé

Is it only fit for men on foot?

M. 只好人走麼 chih³ hao³ jên² tsou³ mo

S. 第个不過人可走否 di⁾ kuh tsuh peh koo⁾ nyung ᶜkʻau ᶜtseu va⁾

C. 不過係合人行咩 pat˩ kwo⁾ hai² hop˩ ˍyan ˍháng† ˌmé

A Village or Town

What is this place called?

M. 這地名叫甚麼 chê⁴ ti⁴ ming² chiao⁴ shê(n)²-mo

S. 第个地方叫啥名字 di⁾ kuh di⁾ faung kyau⁾ sa⁾ ming z⁾

C. 呢條村叫乜名呢 ˌni ˍtʻíú ˌtsʻün kíú⁾ mat˩ meng²† ˌni

How many houses in this village?

M. 這村裏有多少房子 chê⁴ tsʻun¹ li yu³ to¹-shao fang²-tzŭ

S. 第个村裏有幾化房子 di⁾ kuh ᶜtsʻung ᶜli ᶜyeu ᶜkyi hau⁾ vaung ᶜts

C. 呢條村有幾多(間)屋呢 ˌni ˍtʻíú ˌtsʻün ᶜyaú ᶜkei ₒto (ˌkán) uk˩ ˌni

Where is the post?

M. 郵政局在那兒(*or* 那裏) yu²-chêng⁴-chü² tsai⁴ na³ ʼrh (*or* na³-li)

S. 郵政局拉那裏 yeu tsung⁾ jok la⁾ ᶜʻa ᶜli

C. 書信館喺邊處呢 ˌshü sun⁾ ᶜkwún ᶜhai ₒpín shü⁾ ˌni

Show me the telegraph office.

M. 領我到電報局 ling^{3} wo^{3} tao^{4} tien^{4}-pao^{4}-chü^{2}

S. „ „ „ „ „ „ ᶜling ᶜngoo tau^{ɔ} dien^{ɔ} pau^{ɔ} jok

C. 帶 „ „ „ „ 館 tái^{ɔ} ˢngo tò^{ɔ} tín^{2} pò^{2} ᶜkwún

Is there a telephone office here?

M. 這兒(*or* 這裏)有德律風沒有 chê^{4} 'rh (*or* chê-li) yu^{3} tê^{2}-lü-fêng mei^{2} yu

S. 此地有勿有德律風 ᶜts' di^{ɔ} ᶜyeu 'veh ᶜyeu tuh lih fong

C. 呢處有德律(*or* 電話)館有呢 ˌni shü^{ɔ} ˢyaú tak$_{ɔ}$ lut$_{ɔ}$ (*or* tín^{2} wá^{2}) ᶜkwún ˢmò ˌni

Where is the inn?

M. 客店在那兒(*or* 那裏) k'o^{4}-tien^{4} tsai^{4} na^{3} 'rh (*or* na^{3}-li)

S. „ „ 拉 „ 裏 k'ak dien la^{ɔ} ᶜᶜa ᶜli

C. 歇 „ 喺係邊呢 hít$_{o}$ tím^{ɔ} ᶜhai ₒpín ˌni

We are going to stay the night here.

M. 我們在這兒(*or* 這裏)過宿 wo^{3}-mên tsai^{4} chê^{4} 'rh (*or* chê^{4}-li) kuo^{4} hsiu^{4}

S. 我侬在此地過夜 ᶜngoo nyi^{ɔ} ᶜdze ᶜts' di^{ɔ} koo^{ɔ} ya^{ɔ}

C. „ 哋今晚喺係呢處歇宿 ˢngo téi^{2} ˌkam ˢmán ᶜhai ˌni shü^{ɔ} hít$_{o}$ suk$_{ɔ}$

At a River

What is this river called?

M. 這條河叫甚麼名子 chê^{4} t'iao ho^{2} chiao^{4} shê(n)^{2}-mo ming^{2}-tzŭ

S. 第條河叫啥名字 di^{ɔ} diau 'oo kyau^{ɔ} sa^{ɔ} ming z^{ɔ}

C. 呢 „ „ 係叫乜名 ˌni ˌt'íú ˌho hai^{2} kíú^{ɔ} mat$_{ɔ}$ ˌmeng†

How deep is the river?

M. 那條河多深 na⁴ t'iao ho² to¹ shên¹

S. 第 „ „ 有幾化深 di⁷ diau ʻoo ᶜyeu ᶜkyi hau⁷ sung

C. 河有幾深呢 ᶜho ᶜyaú ᶜkéi ᶜsham ᶜni

Where is the nearest bridge?

M. 最近的橋在甚麼地方 tsin⁴ chin⁴-ti ch'iao² tsai⁴ shê(n)²-mo ti⁴-fang

S. 頂近个橋拉那裏 ᶜting ᶜjung kuh jau la⁷ ᶜ"a ᶜli

C. 至 „ 度 „ 喺邊處呢 chi⁷ ᶜk'an tò² ᶜk'íú ᶜhai ₒpín shü⁷ ᶜni

Take me there.

M. 領我到這個橋 ling³ wo³ tao⁴ chê⁴-ko ch'iao²

S. „ „ 去 ᶜling ᶜngoo chi⁷

C. 帶 „ „ 個處 tái⁷ ᶜngo hui⁷ ko⁷ shü⁷

Show me the nearest ferry.

M. 你領我到最近的擺渡口兒 ni³ ling³ wo³ tao⁴ tsui⁴ chin⁴ ti pai³-tu⁴ k'ou³-'rh

S. 領我到頂近个擺渡口 ᶜling ᶜngoo tau⁷ ᶜting ᶜjung kuh ᶜpa doo⁷ ᶜkeu

C. 指路去至近橫水渡個處 ᶜchí lò² hui⁷ chi⁷ ᶜk'an ᶜwáng ᶜshui tò²* ko⁷ shü⁷

Get hold of a boat (canoe).

M. 拿船來 na² ch'uan² lai²

S. „ „ „ nau zen le

C. 搵隻小艇嚟 ᶜwan chekₒ ᶜsíú ᶜt'eng† ᶜlai

Is there a raft here?

M. 這兒 (*or* 這裏) 有木排沒有 chê⁴ 'rh (*or* chê⁴-li) yu³ mu⁴-p'ai² mei² yu

S. 此地有勿有木排 ᶜts' di⁷ ᶜyeh 'veh ᶜyeu mok ba

C. 呢處 „ 木排冇呀 ᶜni shü⁷ ᶜyaú mukₒ ᶜp'ái ᶜmò á²

Is the current strong?

M. 水流得快麼 shui³ liu² tê k'uai⁴ mo

S. „ „ „ 急 „ ˈs lieu tuh kyih ma

C. „ „ 緊唔緊呢 ˈshui ˌlaú ˈkan ˌm ˈkan ˌni

Take us across.

M. 擺我們過去 pai³ wo³-mên kuo⁴ ch'ü⁴

S. „ „ 佢過去 ˈpa ˈngoo nyi˒ koo˒ chi˒

C. 撐 „ 哋 „ „ ˌch'áng ˈngo téi² kwo˒ hui˒.

Where is the easiest place to swim across?

M. 浮水過河是那個地方好 fu² shui³ kuo⁴ ho² shih⁴ na³-ko ti⁴-fang hao³

S. 啥地方頂便當游水過去 sa˒ di˒ faung ˈting bien˒ taung˒ yeu ˈs koo˒ chi˒

C. 想泅過河邊處至易呢 ˈsöng ˌyaú kwo˒ ˌho ˌpin shü² chi˒ yi² ˌni?

You will be rewarded.

M. 有賞錢 yu³ shang³ ch'ien²

S. „ „ 賜 ˈyeu ˈsaung s˒

C. „ „ „ 俾你 ˈyaú ˈshöng ts'z˒ ˈpéi ˈnéi

You must go in front of me.

M. 你得頭裏走 ni³ tei³ t'ou²-li tsou³

S. 儂必定我前走 nong˒ pih ding ngoo˒ zien ˈtseu

C. 你喺我前頭行 ˈnéi ˈhai ˈngo ˌts'ín ˌt'aú ˌháng

What place lies on the other side?

M. 河那邊有甚麼地方 ho² na⁴ pien¹ yu³ shê(n)²-mo ti⁴-fang

S. 河對面有啥个地方 'oo te˒ mien ˈyeu sa˒ kuh di˒ faung

C. 河個便有邊處呢 ˌho kò˒ pín² ˈyaú ˌpín sh'ü˒ ˌni

Is it far to the mouth?

M. 河口遠不遠 ho² k'ou³ yüan³ pu yüan³

S. „ „ „ 勿 „ 'oo ᶜk'eu ᶜyoen 'veh ᶜyoen

C. „ „ „ 唔 „ 呢 ˌho ᶜhaú ˢyün ˌm ˢyün ˌni

A Mountain or Hill

What is the big mountain called?

M. 大山叫甚麼名子 ta⁴ shan¹ chiao⁴ shê(n)²-mo ming²-tzŭ

S. 大山叫啥 doo˒ san kyau˒ sa˒

C. 個大山叫做乜名 ko˒ tái² ˌshán kíú˒ tsò² mat˩ ˌmeng *†

How high is the mountain?

M. 這山多高 chê⁴ shan¹ to¹ kao¹

S. 第个山有幾化高 di˒ kuh san ᶜyeu ᶜkyi hau˒ kau

C. 個山有幾高呢 ko˒ ˌshán ˢyaú ᶜkéi ˌkò ˌni

What is the easiest way up the hill?

M. 登山是那個道好 têng¹ shan¹ shih⁴ na³-ko tao⁴ hao³

S. 那裏一條路好用上山 ᶜa-ᶜli ih diau loo˒ ᶜhau yong˒ ᶜzaung san

C. 想上山邊條路係至易呢 ᶜsöng ˢshöng ˌshán ˌpín ˌt'íú lò² hai² chí˒ yí² ˌni

Can the guns be got up?

M. 炮拉得上去麼 p'ao⁴ la¹ te shang⁴ ch'ü⁴ mo

S. „ „ „ „ „ 否 p'au˒ ᶜla tuh ᶜzaung chi˒ va˒

C. „ „ „ „ 唔拉得呢 p'áú˒ ˌlái tak˩ ˢshöng ˩m ˌlai tak˩ ˌni

Yes, but they cannot be got down on the other side.

M. 拉得去，可那邊下不去 la¹ tê ch'ü⁴, k'o³ na⁴ pien¹ hsia⁴ pu ch'ü⁴

S. 可以个但是别邊勿能下去 ᶜk'au ᶜi kuh, dan²
ᶜz bih pien 'veh nung ᶜ'au chi²

C. 做得但係叫個便唔拉得落 tsò² tak˩, tán² hai²
ᶜko pín² ˍm ˏlái tak˩ lokˍ

Isn't it very steep?

M. 山坡不闖麼 shan¹ p'o¹ pu ch'uang³ mo

S. „ 極斜否 san juh zia va²

C. 係好 „ 咁虐喊卦 hai² ᶜhò ts'e² lá² kwá²

Isn't it dangerous?

M. 沒有險麼 mei² yu hsien³ mo

S. 有險呢 yeu ᶜhyien nyi

C. 係危險喊卦 hai² ˍngai ᶜhím kwá²

Can one get up on horseback?

M. 騎馬上得去麼 ch'i² ma³ shang⁴ tê ch'ü⁴ mo

S. 可以騎馬上去否 ᶜk'au ᶜi ji ᶜmo ᶜzaung chi² va²

C. 騎馬上得唔上得呢 ˍk'e ˢmá ˢshöng tak˩ ˍm ˢshöng tak˩ ˏni

Are there several ways down?

M. 下去有幾條道 hsia⁴ ch'ü⁴ yu³ chi³ t'iao² tao⁴

S. „ „ „ „ „ 路 ᶜ'au chi² ᶜyeu ᶜkyi diau loo²

C. 有幾條路落去係唔係 ᶜyaú ᶜkéi ˍt'íú lò² lokˍ hui², hai² ˍm hai²

Are there any thieves about?

M. 這兒有賊沒有 chê⁴ 'rh yu³ tsei² mei² yu

S. 有勿 „ „ 呢 ᶜyeu 'veh ᶜyeu zuh nyi

C. 在呢處地方左右有賊冇呀 tsoi² ˏni shü² téi²
ˏfong ᶜtso yaú² ˢyaú ts'ákˍ (*or* ts'ákˍ*) ˢmo á²

A Forest

How big is the forest?

M. 那樹林子多大 na⁴ shu⁴ lin²-tzŭ to¹ ta

S. 樹林有幾化 „ zu˒ ling ʿyeu ʿkyi hau˒ doo˒

C. 個樹林有幾 „ 呢 ko˒ shü² ˌlam ˂yaú ʿkéi tái² ˌni

How wide is it?

M. 多寬 to¹ k'uan¹

S. 幾化濶 ʿkyi hau˒ k'weh

C. 有幾 „ 呢 ˂yaú ʿkéi fút˳ ˌni

Where does the road go through the forest?

M. 那道在甚麼地方穿過樹林子 na⁴ tao⁴ tsai⁴ shê(n)²-mo ti⁴-fang ch'uan¹ kuo⁴ shu⁴ lin²-tzŭ

S. 路那裏過樹林 loo˒ ʿʿa ʿli koo˒ zu˒ ling

C. „ 通樹林邊處 lò² ˌt'ung shü² ˌlam ˳pín shü˒

Can mounted troops get through the forest?

M. 馬兵穿過那個樹林子行不行 ma³ ping¹ ch'uan¹ kuo⁴ na⁴-ko shu⁴ lin²-tzŭ hsing² pu hsing²

S. 馬兵可以穿過第樹林否 ʿmo ping ʿk'au ʿi ts'en koo˒ di˒ zu˒ ling va˒

C. 馬兵通得過樹林唔通得過呢 ˂má ˌping ˌt'ung tak˳ kwo˒ shü² ˌlam ˂m ˌt'ung tak˳ kwo˒ ˌni

Yes, but I don't think one can get through with the guns.

M. 行，據我看炮可不行 hsing², chü⁴ wo³ k'an⁴ p'ao⁴ k'o³ pu hsing²

S. 可以但是我想炮就過勿去 ʿk'au ʿi, dan˒ ʿz ʿngoo ʿsiang p'au˒ zieu˒ koo˒ ʼveh chi˒

C. 通得過但我斷估炮不得過 ˌt'ung tak˳ kwo˒, tán² ˂ngo tün˒ ʿkwú p'áú˒ pat˳ tak˳ kwo˒

Railway Station

Is it far to the railway?

M. 鐵路遠不遠 t'ieh^{3} lu^{4} yüan^{3} pu yüan^{3}

S. „ „ „ 勿 „ t'ih loo^{5} ^{c}yoen 'veh ^{c}yoen

C. 去火車路個處遠唔遠呀 hui^{5} ^{c}fo $_{c}$ch'e lò^{2} ko^{5} shü^{5} ^{c}yün $_{c}$m ^{c}yün á^{2}

Only half an hour.

M. 不過半點鐘的道 pu^{4} kuo^{4} pan^{4} tien^{3} chung^{1} ti tao^{4}

S. „ „ „ „ „ 个路 peh koo^{5} pen^{5} ^{c}tien tsong kuh loo^{5}

C. „ „ „ „ „ 就到咯 pat$_{5}$ kwo^{5} pún^{5} ^{c}tím $_{o}$chung tsaú^{2} tò^{5} lo$^{k}_{o}$

When does the train arrive?

M. 火車多喈到 huo^{3} ch'ê^{1} to^{1}-tsan tao^{4}

S. „ „ 啥時候到 ^{c}hoo ts'o sa^{5} z-'eu^{5} tau^{5}

C. „ „ 幾 „ 到呢 ^{c}fo $_{c}$ch'e ^{c}kéi $_{c}$shí tò^{5} $_{c}$ni

When does the train go to ——?

M. 火車甚麼時候兒上 . . . huo^{3} ch'ê^{1} shê(n)^{2}-mo shih^{2}-hou^{4} 'rh shang . . .

S. 火車幾時開到 . . . 去 ^{c}hoo ts'o ^{c}kyi z k'e tau^{5} . . . chi^{5}

C. 火車幾時去 . . . ^{c}fo $_{c}$ch'e ^{c}kéi $_{c}$shí hui^{5} . . .

Where is the next train coming from?

M. 下輪火車打那兒來 hsia^{4} t'ang^{4} huo^{3} ch'ê^{1} ta^{3} na^{3}-'rh lai^{2}

S. 下輪火車從啥地方來 "au t'aung ^{c}hoo ts'o dzong sa^{5} di^{5} faung le

C. 就將來到嘅火車由邊處嚟呢 tsaú^{2} $_{c}$tsöng $_{c}$loi tò^{5} ke^{5} ^{c}fo $_{c}$ch'e $_{c}$yaú $_{o}$pin shü^{5} $_{c}$lai $_{c}$ni

Stop the train!

M. 叫火車站住 chiao^{4} huo^{3} ch'ê^{1} chan^{4} chu^{4}

S. „ „ „ 停哉 kyau^{5} ^{c}hoo ts'o ding tse

C. 停止火車 $_{c}$t'ing ^{c}chí ^{c}fo $_{c}$ch'e

Get me a porter.

M. 叫脚夫來 chiao^{4} chiao^{3} fu lai^{2}

S. 喊挑 „ „ han^{5} t'iau foo le

C. 叫個挑夫嚟 kiú^{5} ko^{5} $_{c}$t'íú $_{o}$fú $_{c}$lai

What is the fare?

M. 車價多少 ch'ê^{1} chia^{4} to^{1}-shao^{3}

S. „ 費幾化 ts'o fi^{5} ^{c}kyi hau^{5}

C. 火車脚係幾多呢 ^{c}fo $_{c}$ch'e kok$_{o}$ hai^{2} ^{c}kéi $_{o}$to $_{o}$ni

Where is my luggage?

M. 我的行李在那兒 wo^{3} ti hsing^{2}-li tsai^{4} na^{3} 'rh

S. „ 个 „ „ 拉 „ 裏 ^{c}ngoo kuh ^{c}ang ^{c}li la^{5} ^{c}'a ^{c}li

C. 我啲的行李呢 ^{c}ngo $_{o}$ti $_{c}$hàng ^{c}léi $_{o}$ni

Inquiries about Troops

Have you seen our troops?

M. 我們的兵你看見了沒有 wo^{3}-mên^{1} ti ping^{1} ni^{3} k'an^{4}-chien lo mei^{2} yu

S. 我呢个兵儂看見否 ^{c}ngoo nyi kuh ping nong^{5} k^{c}oen^{5} kyien^{5} va^{5}

C. 你見我哋嘅兵唔見呀 ^{c}néi kín^{5} ^{c}ngo téi^{2} ke^{5} $_{c}$ping $_{c}$m kín^{5} á^{5}

Do you know where the troops are?

M. 兵在那兒你知道不知道 ping^{1} tsai^{4} na^{3} 'rh ni^{3} chih^{1}-tao pu chih^{1}-tao^{4}

S. 兵丁儂曉得拉那裏 ping ting nong˃ a ˂hyau tuh la˃ ˂a ˂li

C. 你知個啲的兵喺邊處知唔知呀 ˂néi ˏchí ko˃ ˳tí ˏping ˂hai ˳pín shü˃ ˏchí ˍm ˏchi á˃

Yes, I saw them by the wood.

M. 知道，樹林子旁邊看見了 chih¹-tao, shu⁴ lin²-tzŭ p'ang² pien¹ k'an⁴-chien lo

S. 曉得个我看見伊拉在樹林旁邊 ˂hyau tuh kuh ˂ngoo k'oen˃ kyien˃ yi la˃ ˂dze zu˃ ling baung pien

C. 知到，我見佢哋喺樹林邊 ˏchí tò˃, ˂ngo kín˃ ˂k'ui téi² ˂hai shü² ˍlam ˳pín

What sort of troops, and how many are they?

M. 甚麼樣兒的兵，有多少 shê(n)²-mo yang⁴ 'rh ti ping¹, yu³ to¹-shao³

S. 兵丁啥樣子，有幾化 ping ting sa˃ yang ˂ts, ˂yeu ˂kyi hau˃

C. 乜野兵呢有幾多呢 mat, ˂ye ˏping ˏni, ˂yaú ˂kéi ˳to ˏni

Five thousand, with cavalry and guns.

M. 五千，連馬兵帶炮 wu³ ch'ien¹, lien² ma³ ping¹ tai⁴ p'ao⁴

S. ,, ,, ,, ,, ,, ,, ,, 'ng ts'ien, lien ˂mo ping ta˃ p'au˃

C. ,, ,, ，又有馬兵，又有炮添 ˂ng ˏts'ín, yaú² ˂yaú ˂má ˏping, yaú² ˂yaú p'áú˃ ˏt'ím

Since when are they there?

M. 兵多嗰到那兒 ping¹ to¹-tsan tao⁴ na⁴ 'rh

S. 伊拉幾時到 yi la˃ kyi z tau˃

C. 自從 ,, ,, 佢哋係喺個處 tsz² ˍts'ung ˂kéi ˍshí ˂k'ui téi² hai² ˂hai kò˃ shü˃

In which direction have they marched?

M. 兵向那裏走了 ping[1] hsiang[4] na[3] li tsou[3] lo

S. „ 走到那裏路 ping ˈtseu tauˀ ˈˈa ˈli looˀ

C. 佢哋向邊頭行軍呢 ˧kˈui téi[2] höngˀ ˌpín ˧tˈaú ˧hang ˧kwan ˧ni

Where is an officer?

M. 帶兵的官在那兒 tai[4] ping[1] ti kuan[1] tsai[4] na[3] 'rh

S. 兵官拉啥地方 ping kwen laˀ saˀ diˀ faung

C. 邊處有個武官呢 ˌpín shüˀ ˧yaú koˀ ˧mò ˧kwun ˌni

Take me to the Colonel.

M. 領我見協臺 ling[3] wo[3] chien[4] hsieh[2]-tˈai

S. „ „ „ „ „ ˈling ˈngoo kyienˀ sieh de

C. 帶 „ 去見參將 táiˀ ˧ngo huiˀ kínˀ ˧tˈˈám tsöngˀ

I have a letter from our General.

M. 我帶我們總兵的信 wo[3] tai[4] wo[3]-mên tsung[3]-ping[1] ti hsin[4]

S. „ „ „ 佢 „ „ 个 „ ˈngoo taˀ ˈngoo nyi ˈtsong ping kuh singˀ

C. 我有一封信係我哋嘅將軍寫嚟嘅 ˧ngo ˧yaú yat˥ ˧fung sunˀ haiˀ ˧ngo téiˀ keˀ ˧tsöng ˧kwan ˈse ˧lai keˀ

Food and Drink

I am hungry, I wish to eat.

M. 我餓了，要吃 wo[3] ê[4] lo, yao[4] chˈih[1]

S. „ „ 哉，„ „ 飯 ˈngoo ngooˀ tse, iauˀ chuh vanˀ

C. „ 肚餓 „ 食呀 ˧ngo ˧tˈò ngoˀ, yíúˀ shik˧ áˀ

I am thirsty, I wish to drink.

M. 我渴了，要喝 wo[3] kˈê[3] lo, yao[4] ho[1]

S. „ 口乾哉，要呷 ˈngoo ˈkˈeu koen tse, iauˀ hah

C. 我頸渴想飲 ˧ngo ˈkeng† hot˧ ˈsöng ˈyam

Where can I get food?

M. 飯那兒找 fan^{4} na^{3} 'rh chao^{3}

S. 啥地方有飯 sa^{5} di^{5} faung ^{c}yeu van^{5}

C. 邊處有食物 $_{o}$pín shü^{5} ^{c}yaú shik$_{2}$ mat$_{2}$

Innkeeper, we want a meal.

M. 掌櫃的，我們要飯 chang^{3} kuei^{4} ti, wo^{3}-mên yao^{4} fan^{4}

S. 僮倌，我侬要飯 daung kwen, ^{c}ngoo nyi iau^{5} van^{5}

C. 店主我哋想食一餐 ^{c}tím ^{c}chü, ^{s}ngo téi^{2} ^{c}söng shik$_{2}$ yat$_{2}$ $_{c}$ts'án

Give me something to drink.

M. 給我喝 kei^{3} wo^{3} ho^{1}

S. 撥點我呷 peh dien ^{c}ngoo hah

C. 俾野 „ 飲 ^{c}péi ^{s}ye ^{s}ngo ^{c}yam

Hurry up, we haven't much time.

M. 快快，我們忙 k'uai^{4} k'uai^{4}, wo^{3}-mên mang^{2}

S. „ 來，„ 侬勿要費工夫 kw'a^{5} le, ^{c}ngoo nyi veh iau^{5} fi^{5} kong foo

C. 快啲，我哋唔得閒 fái^{5} $_{o}$ti, ^{s}ngo téi^{2} $_{s}$m tak$_{2}$ $_{s}$hán

I am going to pay for it.

M. 我給錢 wo^{3} kei^{3} ch'ien^{2}

S. „ 出 „ ^{c}ngoo ts'eh dien

C. „ 俾 „ 呀 ^{s}ngo ^{c}péi $_{s}$ts'ín* á^{5}

Have you enough for all my men?

M. 我們的人都要吃，飯彀不彀 wo^{3}-mên^{1} ti jên^{2} tou^{1} yao^{4} ch'ih^{1}, fan^{4} kou^{4} pu kou^{4}

S. 我侬個個人要吃，飯阿彀 ^{c}ngoo nyi kuh kuh nyung iau^{5} chuh, van^{5} a keu^{5}

C. 够俾我咁多人食唔够呢 káú^{5} ^{c}péi ^{s}ngo kom^{5} $_{c}$to $_{s}$yan shik$_{2}$ $_{s}$m káú^{5} $_{c}$ni

Is the water good here?

M. 這兒水好麼 chê^{4} 'rh shui^{3} hao^{3} mo

S. 水拉此地是好吃否 ˁs laˀ ˁtsˁ diˀ ˁz ˁhau chuh vaˀ

C. 呢處個啲的水好唔好呀 ˌni shüˀ koˀ ˌoti ˁshui ˁhò ˌm ˁhò áˀ

Have you any fresh eggs?

M. 有新鮮鷄蛋沒有 yu^{3} hsin^{1} hsien^{1} chi^{1}-tan^{4} mei^{2} yu

S. 鮮鮮鷄蛋儂有勿有 sien sien kyi danˀ nongˀ ˁyeu 'veh ˁyeu

C. 有新鮮蛋冇呀 ˁyaú ˌsan ˌsín tán^{2}* ˁmò áˀ

Bring bread, ham, and cheese.

M. 拿麵包, 火腿帶奶餅來 na^{2} mien^{4}-pao^{1}, huo^{3}-tˁui^{3} tai^{4} nai^{3}-ping^{3} lai

S. 拿麵包, 火腿帶奶餅來 nau mienˀ pau, ˁhoo ˁtˁe taˀ ˁna ˁping le

C. 撦麵飽, 火腿, 枝士嚟 ˁning mín^{2} ˌpáú, ˁfo tˁuiˀ*, ˌchí sz^{2}* ˌlai

Bring some tea.

M. 拿茶來 na^{2} chˁa^{2} lai^{2}

S. „ „ „ nau dzo le

C. 撦啲茶嚟 ˌning ˌoti ˌchˁá ˌlai

Bring us the bill.

M. 拿賬來 na^{2} chang^{4} lai^{2}

S. „ „ „ nau tsang le

C. 撦條單嚟喇 ˌning ˌtˁíú ˌtán ˌlai ˌlá

How much do we owe?

M. 我們該多少錢 wo^{3}-mên kai^{1} to^{1}-shao^{3} chˁien^{2}

S. „ 侬 „ 出幾化錢 ˁngoo nyi ke tsˁeh ˁkyi hauˀ dien

C. „ 哋欠幾多呢 ˁngo téi^{2} hímˀ ˁkéi ˌto ˌni

How much does this cost?

M. 價錢多少 chia^{4}-ch'ien to^{1}-shao^{3}

S. 啥價錢 sa^{5} ka^{5} dien

C. 呢啲係幾多價錢呢 $_{c}$ni $_{o}$ti hai^{2} ^{c}kéi $_{o}$to ká^{5} $_{c}$ts'in $_{c}$ni

Billets, Lodging and Stabling

I want quarters for fifty men.

M. 我要屋子彀五十人住 wo^{3} yao^{4} wu^{1}-tzŭ kou^{4} wu^{3} shih^{2} jên^{2} chu^{4}

S. 我要彀五十个人住个房子 ^{c}ngoo iau^{5} keu^{5} ^{c}ng seh kuh nyung dzu^{5} kuh vaung-^{c}ts

C. 我要地方俾五十人投宿 ^{c}ngo yíú^{5} téi^{2} $_{c}$fong ^{c}péi ^{c}ng shap$_{2}$ $_{c}$yan $_{c}$t'aú suk$_{5}$

Give me better quarters.

M. 這屋子不好，給我找好的 chê^{4} wu^{1}-tzŭ pu hao^{3}, kei^{3} wo^{3} chao^{3} hao^{3} ti

S. 我要好點个房子 ^{c}ngoo iau^{5} ^{c}hau ^{c}tien kuh vaung-^{c}ts

C. 俾好啲的地方 ^{c}péi ^{c}hò $_{o}$ti téi^{2} $_{c}$fong

Have you found me quarters yet?

M. 還沒給我找屋子麼 hai^{2} mei^{2} kei^{3} wo^{3} chao^{3} wu^{1}-tzŭ mo

S. 我个房子尋着否 ^{c}ngoo kuh vaung-^{c}ts zing dzak va^{5}

C. 搵倒地方俾我哋人投宿未呀 ^{c}wan ^{c}tò téi^{2} $_{c}$fong ^{c}péi ^{c}ngo téi^{2} $_{c}$yan $_{c}$t'aú suk$_{5}$ méi^{2} á^{5}

Where is the owner of the house?

M. 房主在那裏 fang^{2} chu^{3} tsai^{4} na^{3} li

S. „ 東拉 „ „ vaung tong la^{5} ^{c}a ^{c}li

C. 屋主喺邊處呢 uk$_{5}$ ^{c}chü ^{c}hai $_{o}$pín shü^{5} $_{c}$ni

Light the fire, please.

M. 請點火 ch'ing^{3} tien^{3} huo^{3}

S. „ 生 „ ˈts'ing sang ˈhoo

C. 唔該你透火爐 ˌm ˌkoi ˈnéi t'aú˒ ˈfo ˌlò

I want stabling for sixteen horses.

M. 我要馬房殼栓十六匹馬 wo^{3} yao^{4} ma^{3}-fang^{2} kou^{4} shuan^{1} shih liu^{4} p'i^{1} ma^{3}

S. 我要好歇十六匹馬个馬棚 ˈngoo iau˒ ˈhau hyih seh lok p'ih ˈmo kuh ˈmo bang

C. 我有十六隻馬,我要馬房咁多隻够使 ˈngo ˈyaú shap$_{2}$ luk$_{2}$ chek$_{o}$ ˈmá, ˈngo yíú˒ ˈmá ˌfong kom˒ ˌto ˈchek$_{o}$ kaú˒ ˈshai

Thanks, we want nothing more.

M. 費心,我們再不要甚麼 fei^{4} hsin^{1}, wo^{3}-mên tsai^{4} pu yao^{4} shê(n)^{2}-mo

S. 費心,我侕勿要啥哉 fi˒ sing, ˈngoo nyi˒ 'veh iau˒ sa˒ tse

C. 多謝,冇第二樣野要咯 ˌto tse^{2}, ˈmò tai^{2} yí^{2} yöng^{2} ˈye yíú˒ lok$_{o}$

Tell all people not to be afraid.

M. 叫衆人都不要怕 chiao^{4} chung^{4} jên^{2} tou^{1} pu yao^{4} p'a^{4}

S. „ 大家勿要怕 kyau˒ doo˒ kya 'veh iau˒ p'o˒

C. 講各人聽唔使慌 ˈkong kok$_{o}$ ˌyan ˌt'eng † ˌm ˈshai ˌfong

Where is there some clean water?

M. 那兒有乾淨水 na^{3} 'rh yu^{3} kan^{1}-ching^{4} shui^{3}

S. 啥地方有清 „ sa˒ di˒ faung ˈyeu ts'ing ˈs

C. 邊處有乾淨 „ 呢 ˌpín shü˒ ˈyaú ˌkon tseng^{2} † ˈshui ˌni

Clear those houses; we are going to quarter our men in them.

M. 騰那些房子,我們的人要住 t'êng^{2} na^{4} hsieh^{1} fang^{2}-tzŭ, wo^{3}-mên ti jên^{2} yao^{4} chu^{4}

S. 出清伊个房子,我侬个人要住 ts'eh ts'ing yi kuh vaung-ˁts, ˁngoo nyi˒ kuh nyung iau˒ dzu˒

C. 令個啲的屋出清人物,俾我啲的人喺處歇宿 ling^{2} ko˒ ˌti uk, ch'ut, ˌts'ing ˌyan mat$_{2}$, ˁpéi ˢngo ˌti ˌyan ˁhai shü˒ hít$_{o}$ suk,

Have you smallpox in this village?

M. 這村裏有出痘子的麼 chê^{4} ts'un^{1} li yu^{3} ch'u^{1} tou^{4}-tzŭ ti mo

S. 第个村裡有勿有人出天花 di˒ kuh ˁts'ung ˁli ˁyeu 'veh ˁyeu nyung t'ien hwo

C. 呢條村有出痘病症冇呀 ˌni ˌt'íú ˌts'ün ˢyaú ch'ut, taú^{2}* peng^{2}† ching˒ ˢmò á˒

Tell me the house where there are sick men.

M. 那個房子裏有病人你給我指出來 na^{3}-ko fang^{2}-tzŭ li yu^{3} ping^{4} jên^{2} ni^{3} kei^{3} wo^{3} chih^{3} ch'u^{1} lai^{2}

S. 指點我看啥个房子有生病人 ˁts ˁtien ˁngoo k'oen˒ sa˒ kuh vaung ˁts ˁyeu sang bing˒ nyung

C. 話我知邊間屋係有病人 wá^{2} ˢngo ˌchí ˌpín ˌkán uk, hai^{2} ˢyaú peng^{2}† ˌyan

Is it feverish here?

M. 這個地方有甚麼熱病 chê^{4}-ko ti^{4}-fang yu^{3} shên^{2}-mo jê^{4} ping^{4}

S. 此地有啥熱病否 ˁts' di˒ ˁyeu sa˒ nyih bing va˒

C. 呢處地方時常係有多熱症係唔係呀 ˌni shü˒ téi^{2} ˌfong ˌshí shöng hai^{2} ˢyaú ˌto yit$_{2}$ ching˒ hai^{2} ˌm hai^{2} á˒

Is it healthy here ?

M. 這兒水土不損精神麼 chê[4] 'rh shui[3]-t'u[3] pu[4] sun[3] ching[1]-shên mo

S. 此地水土傷精神否 ˈts' diˀ ˈs ˈt'oo saung tsing-zung vaˀ

C. 呢處係衛身嘅地方唔係呢 ˌni shüˀ haiˀ waiˀ ˌshan keˀ téiˀ ˌfong ˌm haiˀ ˌni

Strangers or Suspects

Stop! or I shall shoot.

M. 站住,不然我打鎗 chan[4] chu[4], pu[4] jan[2] wo[3] ta[3] ch'iang[1]

S. 立定, ,, 立定我就開鎗 lih dingˀ, veh lih dingˀ ˈngoo zieuˀ k'e ts'iang

C. 停止,唔係我開鎗彈(*or* 打)你 ˌt'ing ˈchí, ˌm haiˀ ˈngo ˌhoi ˌts'öng tánˀ (*or* ˈtá) ˈnéi

Don't move from the spot.

M. 別動窩兒 pieh[2] tung[4] wo[1] 'rh

S. 勿要移動 'veh iauˀ hyi ˈdong

C. 企處咪郁 ˈk'éi shüˀ ˈmai yuk,

Stand a little farther off.

M. 遠着點兒 yüan[3] cho tie(n)[3] 'rh

S. 立遠點 lih ˈyoen ˈtien

C. 企開啲 ˈk'éi ˌhoi ˌti

Come closer.

M. 來近點兒 lai[2] chin[4] tie(n)[3] 'rh

S. 走 ,, ,, ˈtseu ˈjung ˈtien

C. 行埋啲 ˌháng† ˌmái ˌti

You are trying to deceive me.

M. 你要欺哄我 ni³ yao⁴ ch'i¹-hung wo³

S. 儂 „ „ 騙 „ nong⁷ iau⁷ chi p'ien⁷ ˢngoo

C. 你想嘆 (or 欺騙) 我 ˢnéi ˢsöng t'am⁷ (*or* ˌhéi p'ín⁷) ˢngo

You are lying!

M. 你撒謊 ni³ sa¹-huang³

S. 儂說 „ nong⁷ soeh ˢhwaung

C. 你講大話 ˢnei ˢkong tái² wá²

You are a spy!

M. 你是個奸細 ni³ shih⁴ ko chien¹-hsi⁴

S. 儂 „ 个 „ „ nong⁷ ˢz kuh kan si⁷

C. 你係做探子 ˢnéi hai² tsò² t'ám⁷ ˢtsz (*or* 線人 sín⁷ ˌyan)

Turn round.

M. 轉身 chuan³ shên¹

S. „ „ ˢtsen sung

C. 擰轉 ning² chün⁷

Hands up!

M. 舉手 chü³ shou³

S. 揖 „ jien ˢseu

C. 舉 „ ˢkui ˢshaú

Put down your arms.

M. 兵器擱地下 ping¹-ch'i⁴ ko¹ ti⁴-hsia⁴

S. 放下兵器來 faung ˢ'au ping chi⁷ le

C. 放落你哋的軍器 fong⁷ lok₂ ˢnéi ˌtí ˌkwan héi⁷

Surrender.

M. 投降 t'ou² hsiang²

S. „ „ deu ˢaung

C. „ „ ˌt'aú ˌhong

You may not talk to any one.

M. 你別跟誰說話 ni³ pieh² kên¹ shui² shuo¹ hua⁴

S. 勿許儂搭別人白話 'veh ʰhyui nongˀ tah pih nyung bak woˀ

C. 唔准你同人哋講說話 ˩m ʰchun ˧néi ˩tʻung ˩yan téi² ʰkong shüt˳ wá²

You are under arrest.

M. 現在看守你 hsien⁴ tsai⁴ kʻan⁴ shou³ ni³

S. 儂是 „ 管住哉 nongˀ ʰz kʻoenˀ ʰkwen dzuˀ tse

C. 現時押留你咯 yín² ˩shí áp˳ ˩laú ˧néi lok˳

Take off your belt.

M. 你脫帶子 ni³ tʻo¹ tai⁴-tzŭ

S. 脫下 „ „ 來 tʻeh ʰʻau taˀ-ʰts le

C. 除你個腰帶 ˩chʻui ˧néi koˀ ˩yíú táiˀ

If you behave, you will be safe.

M. 你若守規矩，沒有可怕 ni jo⁴ shou³ kuei¹-chü, mei² yu³ kʻo³ pʻa⁴

S. 儂若使照規矩做，就勿要怕 nongˀ zak sˀ tsauˀ kwe ʻkyui tsooˀ, zieuˀ 'veh iauˀ pʻo

C. 如果你嘅行爲係妥當，咁就冇事咯 ˩yü ʰkwo ˧néi keˀ ˩hang ˩wai hai² ˧tʻo tongˀ, ʰkom tsau² ˧mò sz² lok˳

Wounds or Sickness

Do you feel better?

M. 你覺着好麼 ni³ chüeh² cho hao³ mo

S. 儂阿覺着好點 nongˀ a kauh dzak ʰhau ʰtien

C. 你見好啲嗎 ˧néi kínˀ ʰhò ˳tí máˀ

Do you feel worse?

M. 你更不好麼 ni³ kêng⁴ pu hao³ mo

S. 儂 „ 加勿好否 nong˃ kung˃ ka 'veh ˁhau va˃

C. 你見身子有咁好咩 ˧néi kín˃ ˩shan ˁtsz ˧mò kom˃ ˁhò ˩me

What is the matter?

M. 你怎麼了 ni³ tsê(n)³-mo lo

S. 有啥事體 yeu sa˃ z˃ ˁt'i

C. 乜野事呢 mat, ˧ye sz² ˩ni

I am wounded.

M. 我受了傷 wo³ shou⁴ lo shang¹

S. „ „ 傷哉 ˁngoo ˁzeu saung tse

C. „ 打 „ 咯 ˧ngo ˁtá ˩shöng lok˳

Sit down, lie down.

M. 坐下, 躺下 tso⁴ hsia⁴, t'ang³ hsia⁴

S. „ „ 來, 睏下來 ˁzoo ˁ'au le, k'wung˃ ˁ'au le

C. „ 處, 瞓倒處 ˧ts'o† shü˃, fan˃ ˁtò shü˃

Undress yourself.

M. 脫衣裳 t'o¹ i¹-shang

S. „ „ „ t'oeh i-zaung

C. „ 衫褲 t'üt˳ ˩shám fú˃

Give me water.

M. 給我水喝 kei³ wo³ shui³ ho¹

S. 撥點 „ 我呷 peh ˁtien ˁs ˁngoo hah

C. 俾啲 „ „ ˁpéi ˳tí ˁshui ˧ngo

Here is water and brandy.

M. 這兒有水跟布蘭的酒 chê^{4} 'rh yu^{3} shui^{3} kên^{1} pu^{4}-lan^{2}-ti chiu^{3}

S. 此地有水搭白蘭地酒 ᶜts'-diˀ ᶜyeu ᶜs tah beh-lan-di ᶜtsieu

C. 呢處有水,有罌欄地酒 ˌni shüˀ ˧yaú ᶜshui, ˧yaú pá^{2} ˧lán téi^{2} ˌtsau

Give me a bandage.

M. 把裹布給我 pa^{4} kuo^{3}-pu^{4} kei^{3} wo^{3}

S. 撥一長布我 peh ih dzang pooˀ ᶜngoo

C. 俾條綳帶過我 ᶜpéi ˧t'íú ˌmáng táiˀ ᶜkwo ˧ngo

Help me with the bandaging.

M. 你幫我裹一裹 ni^{3} pang^{1} wo^{3} kuo^{3} i^{1} kuo^{3}

S. 幫我包一包 paung ᶜngoo pau ih pau

C. 你幫我扎呢啲綳帶 ˧néi ˌpong ˧ngo chát$_{o}$ ˌni $_{o}$ti ˌmáng táiˀ

Where are you wounded?

M. 你在那兒受傷 ni^{3} tsai^{4} na^{3} 'rh shou^{4} shang^{1}

S. 儂拉 „ 裏 „ „ nongˀ laˀ ᶜ'a ᶜli ᶜzeu saung

C. 你傷親邊處 ˧néi ˌshöng ˌts'an $_{o}$pín shüˀ

In the arm, the back.

M. 在肘臂; 在背後 tsai^{4} ko^{1}-pei ; tsai^{4} pei^{4} hou^{4}

S. 拉手臂上, 拉背上 laˀ ᶜseu piˀ laungˀ ; laˀ peˀ laungˀ

C. (upper arm) 在手臂 tsoi^{2} ᶜshaú péiˀ; (fore arm) 在手肘 tsoi^{2} ᶜshaú ᶜchaú ; (the back) 在背脊 tsoi^{2} puiˀ tsek$_{o}$†

Keep quiet.

M. 你安靜點兒 ni^{3} an^{1}-ching tie(n)^{3} 'rh

S. 勿要響, 勿要動 'veh iauˀ ᶜhyang, 'veh iau^{2} ᶜdong

C. 咪嘈 ˧mai ˧ts'ò ; 咪出聲 ˧mai ch'ut, ˌsheng†

You mustn't speak.

M. 你別說話 ni³ pieh² shuo¹ hua

S. 一定勿 „ ih ding⁵ 'veh wo⁵

C. 咪講 ˢmai ᶜkong; 唔准你講說話 ˌm ᶜchun ˢnéi ᶜkong shüt₀ wá²

Go to the doctor and tell him to come at once.

M. 找大夫請他馬上來 chao³ tai¹-fu ch'ing³ t'a¹ ma³-shang⁴ lai

S. 去請郎中 (*or* 醫生) 立刻就來 chi⁵ ᶜts'ing laung-tsong (*or* i-sung) lih k'uh zieu⁵ le

C. 去叫醫生卽刻嚟 hui⁵ kíú⁵ ˌyí ˌsháng† tsík₅ hak₅ ˌlaí

Take this medicine.

M. 你吃這藥 ni³ ch'ih¹ chê⁴ yao⁴

S. 儂 „ 第个藥 nong⁵ chuh di⁵ kuh yak

C. 食呢啲藥 shik₂ ˌní ₀ti yök₂

Take this man to hospital.

M. 帶這個人上病房 tai⁴ chê⁴-ko jên² shang⁴ ping⁴ fang²

S. 送第个 „ 到醫院去 song⁵ di⁵ kuh nyung tau⁵ i yoen⁵ chi⁵

C. 帶呢個人去醫生館 tái⁵ ˌni ko⁵ ˌyan hui⁵ ˌyí ˌsháng† ᶜkwún

General Phrases

Good night, madam.

M. 太太再見 t'ai⁴-t'ai⁴ tsai⁴ chien⁴

S. „ „ 明朝會 t'a⁵-t'a⁵ ming tsau we⁵

C. 早睡奶奶 ᶜtsò shui² ˌnái ˌnái*

Good morning, madam.

M. 太太好 t'ai^{4}-t'ai^{4} hao^{3}

S. „ „ 早 t'a^{5}-t'a^{5} ^{c}tsau

C. 早晨師奶 (*or* 奶奶) ^{c}tsò $_{c}$shan ^{c}sz $_{o}$nái (*or* $_{c}$nái $_{c}$nái*)

Good morning, sir.

M. 老爺好 lao^{3}-yeh^{2} hao^{3}

S. 先生早 sien-sang ^{c}tsau

C. 早晨先生 ^{c}tsò $_{c}$shan ^{c}sín ^{c}sháng†

How are you?

M. 你好麼 ni^{3} hao^{3} mo

S. 儂 „ 否 nong^{5} ^{c}hau va^{5}

C. 你 „ 呀 ^{c}néi ^{c}hò á^{5}

I am sorry.

M. 得罪了 忍 tê^{2} tsui^{4} lo nin^{2}

S. 對勿起 te^{5} 'veh ^{c}chi

C. 唔該呀 $_{c}$m ^{c}koi á^{5}

What is the news?

M. 有甚麼新聞 yu^{3} shê(n)^{2}-mo hsin^{1} wên^{2}

S. „ 啥新聞 ^{c}yeu sa^{5} sing vung

C. „ 乜 „ „ 呢 ^{c}yaú mat$_{5}$ ^{c}san $_{c}$man* ^{c}ni

Do you know English?

M. 英國話你懂不懂 ying^{1}-kuo hua^{4} ni tung^{3} pu tung^{3}

S. „ „ „ 儂 „ 勿 „ iung-kok wo^{5} nong^{5} ^{c}tong 'veh ^{c}tong

C. 你識英話唔識呢 ^{c}néi shik$_{5}$ ^{c}ying wá^{2}* $_{c}$m shik$_{5}$ ^{c}ni

Speak slowly.

M. 說慢點兒 shuo^{1} man^{4} tie(n)^{3} 'rh

S. 慢 „ 話 man^{5} man^{5} wo^{5}

C. „ „ 講 mán^{2} mán^{2}* ^{c}kong

Please.

M. 請 ch'ing^{3}

S. „ ˂ts'ing

C. 多煩你 ˂to ˍfán ˂néi

Thank you.

M. 多謝 to^{1} hsieh^{4}; 費心 fei^{4} hsin^{1}; 勞駕 lao^{2} chia^{4}

S. „ „ too zia'; „ „ fi' sing

C. „ „ 你 ˂to tse' ˂néi

Do you understand?

M. 你懂不懂 ni^{3} tung^{3} pu tung^{3}

S. 儂懂否 nong' ˂tong va'

C. 你曉唔曉呢 ˂néi ˂hiú ˍm ˂hiú ˂ni

I don't understand.

M. 我不懂 wo^{3} pu tung^{3}

S. „ 勿 „ ˂ngoo 'veh ˂tong

C. „ 唔曉 (*or* 明白) ˂ngo ˍm ˂hiú (*or* ˍming pák$_{2}$)

All right.

M. 可以 k'o^{3}-i^{3}; 好 hao^{3}

S. „ „ ˂k'au-˂i; „ ˂hau

C. 啱啲徙 ₀ngám sái'

There is no news.

M. 沒甚麼信息 mei^{2} shê(n)^{2}-mo hsin^{4} hsi

S. 姆啥信息 m sa' sing' sih

C. 冇新聞 ˂mò ˂san ˍman*

How do you know?

M. 你怎麼知道 ni^{3} tsê(n)^{3}-mo chih^{1}-tao^{4}

S. 儂那能曉得 nong' na nung ˂hyau tuh-

C. 你黠知 ˂néi ˂tím ˂chí

It is false.

M. 是假的 shih⁴ chia³ ti

S. „ „ 个 ˁz ˁka kuh

C. 係 „ hai² ˁká

I am glad.

M. 我很喜歡 wo³ hên³ hsi³ huan¹

S. „ 極 „ „ ˁngoo juh ˁhyi hwen

C. „ 歡 „ ˧ngo ˩fún ˁhéi

Possible.

M. 行 hsing²; 可以 kˁo³-i³

S. 能 彀 nung keu˃; (2) ˁkˁau-ˁi

C. 可以(做)得 ˁho ˧yí (tsò²) tak˩

Rain threatens.

M. 要 下雨 yao⁴ hsia⁴ yü³

S. „ 落 „ 哉 iau˃ lauh ˁyui tse

C. 天將近落雨 ˩tˁín ˩tsöng kan² lok˩ ˧yü

It is moonlight.

M. 有月亮 yu³ yüeh⁴-liang⁴

S. „ „ „ ˁyeu nyoeh liang˃

C. 月光咯 yüt˩ ˩kwong lokˌ

How old are you?

M. 你多大年幾 ni³ to¹ ta⁴ nien² chi

S. 儂幾歲哉 nong˃ ˁkyi soe˃ tse

C. (politely) 貴庚 kwai˃ ˩kang; (ordinarily) 你今年幾多歲 ˧néi ˩kam ˩nín ˁkéi ˩to sui˃

I must go.

M. 我得去 wo^{3} tei^{3} ch'ü^{4}

S. „ 必定去 ᶜngoo pih ding^{2} chi^{2}

C. „ „ 要 „ ᶜngo pít, yíú^{2} hui^{2}

What did he say?

M. 他說甚麼了 t'a^{1} shuo^{1} shê(n)^{2}-mo lo

S. 伊話啥 yi wo^{2} sa^{2}

C. 佢 „ 乜野呢 ᶜk'ui wá^{2} mat, ᶜye ˌni

Excuse me.

M. 借光 chieh^{4} kuang^{1}; 容諒我 jung^{2} liang wo^{3}

S. 原諒 nyoen liang^{2}; 對勿起 te^{2} 'veh ᶜchi

C. 容諒我 ˌyung löng^{2} ᶜngo

There is a fire.

M. 走了水了 tsou^{3} lo shui^{3} lo

S. 有失火哉 yeu seh ᶜhoo tse

C. „ 火咯 ᶜyaú ᶜfo lo^{k}$_{o}$

Impossible.

M. 不行 pu^{4} hsing^{2}; 做不得 tso^{4} pu tê

S. 做勿來 tsoo^{2} 'veh le

C. 不可 pat, ᶜho; 做唔得 tsò^{2} ˌm tak,

Please come in; sit down.

M. 請進來; 請坐 ch'ing^{3} chin^{4} lai; ch'ing^{3} tso^{4}

S. „ „ „ ; „ „ ᶜts'ing tsing^{2} le; ᶜts'ing ᶜzoo

C. „ 入嚟坐 ᶜtseng † yap$_{2}$ ˌlai ᶜts'o †

God grant it!

M. 只盼老天爺賞恩 chih^{3} p'an^{4} lao^{3} t'ien^{1} yeh^{2} shang^{3} ên^{1}

S. „ 望天老 „ „ „ tsuh maung^{2} t'ien ᶜlau ya ᶜsaung ung

C. 願上主恩准此事 yün^{2} shöng^{2} ᶜchü ˌyan ᶜchun ᶜts'z sz^{2}

It is true.

M. 是眞的 shih⁴ chên¹ ti

S. „ „ 个 ˁz tsung kuh

C. 係眞 hai² ˌchan

What are your wishes?

M. 你要的是甚麼 ni³ yao⁴ ti shih⁴ shê(n)²-mo

S. 儂个情願啥事 nong˃ kuh dzing nyoen˃ sa˃ z˃

C. 你要乜野呢 ˁnéi yíú˃ mat˩ ˁye ˌni

Thank God! I am well!

M. 託福我好了 tˁo¹ fu² wo³ hao³ lo

S. „ „ „ „ 哉 tˁauh fok ˁngoo ˁhau tse

C. 多謝上帝我好呀 ˌto tse² shöng² tai˃ ˁngo ˁhò á˃

You are welcome.

M. 您來的很好 nin² lai² ti hên³ hao³

S. 儂 „ 得極 „ nong˃ le tuh juh ˁhau

C. 喜歡迎接你到嚟 ˁhéi ˌfún ˌying tsíp˳ ˁnéi tò˃ ˌlai

Is he at home?

M. 他在家麼 tˁa¹ tsai⁴ chia¹ mo

S. 伊拉屋裏否 yi la˃ ok ˁli va˃

C. 佢在 „ 踫唔在呢 ˁkˁui tsoi² uk˩ ˁkˁéi ˌm tsoi² ˌni

Who is it?

M. 他是誰 tˁa¹ shih⁴ shui²

S. 伊 „ 啥人 yi ˁz sa˃ nyung

C. 係乜誰呀 hai² mat˩ ˌshui* á˃

Let him enter.

M. 叫他進來 chiao⁴ tˁa¹ chin⁴ lai²

S. „ 伊 „ „ kyau˃ yi tsing˃ le

C. 俾佢入嚟喇 ˁpéi ˁkˁui yap˩ ˌlai ˌlá

Does the water boil?

M. 水開了沒有 shui³ k'ai¹ lo mei² yu

S. „ „ 哉否 ʿs kʻe tse vaˀ

C. „ 滾唔滾呢 ʿshui ʿkwan ˌm ʿkwan ˌni

Wait for me.

M. 等我 têng³ wo³

S. „ 等我 ʿtung ʿtung ʿngoo

C. „ 我 ʿtang ʿngo

Come with me.

M. 跟着我來 kên¹-cho wo³ lai²

S. 搭我一淘來 tah ʿngoo ih dau le

C. 同 „ 去 ˌtʻung ʿngo huiˀ

Good-bye.

M. 請 chʻing³

S. 再會 tseˀ weˀ

C. (by host) 好行 ʿhò ˌháng†, *or* 慢慢行 mán² mán²* ˌháng†; (by guest) 坐喇 ʿtsʻo† ˌlá

Au revoir.

M. 再見 tsai⁴ chien⁴

S. „ 來會 tseˀ le weˀ

C. 後會有期 haú² wúi² ʿyaú ˌkʻéi

Pleasant journey.

M. 一路平安 i¹ lu⁴ pʻing² an¹

S. „ „ „ „ ih looˀ bing oen

C. 願你一路平安 yün² ʿnéi yat, lò² ˌpʻing ˌon

Of course.

M. 自然 tzŭ⁴-jan²

S. „ „ zˀ zen

C. „ „ tsz² ˌyín

Please tell me.

M. 請告訴我 ch'ing^{3} kao^{4}-su^{4} wo^{3}

S. „ 儂告訴我 ˈts'ing nongˀ kauˀ sooˀ ˈngoo

C. 唔該 (*or* 多煩) 你話我知 ˌm ˌkoi (*or* ˌto ˌfán) ˈnéi wáˀ ˈngo ˌchí

Did you understand?

M. 你懂了沒有 ni^{3} tung^{3} lo mei^{2} yu

S. 儂已經明白否 nongˀ ˈi kyung ming bak vaˀ

C. 你個時曉唔曉呀 ˈnéi koˀ ˌshí ˈhíú ˌm ˈhíú áˀ

I don't understand.

M. 我不懂 wo^{3} pu tung^{3}

S. „ 勿 „ ˈngoo 'veh ˈtong

C. „ 唔曉 (*or* 明白) ˈngo ˌm ˈhíú (*or* ˌming pákₒ)

What did you say?

M. 你說甚麼了 ni^{3} shuo^{1} shê(n)^{2}-mo lo

S. 儂已經話啥 nong ˈi kyung woˀ saˀ

C. 你話乜野呢 ˈnéi wáˀ matˌ ˈye ˌni

You are mistaken.

M. 你錯了 ni^{3} ts'o^{4} lo

S. 儂 „ 哉 nong ts'o tse

C. 你 „ 呀 ˈnéi ts'oˀ áˀ

No matter.

M. 不要緊 pu^{4} yao^{4} chin^{3}

S. 勿 „ „ 'veh iauˀ ˈkyung

C. 冇相干 ˈmò ˌsöng ˌkon

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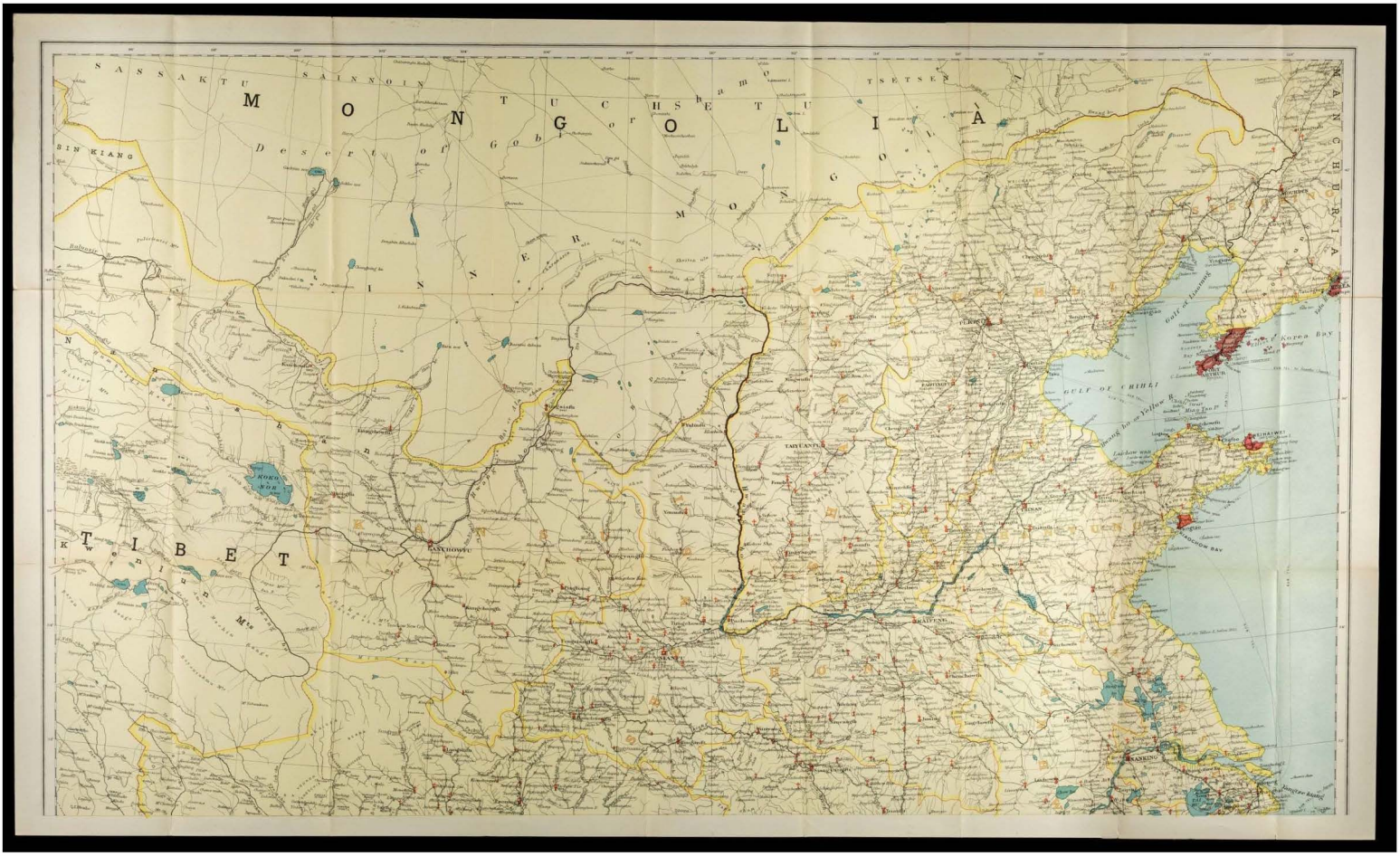
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MONGOLIA
TIBET
Desert of Gobi
SASSAKTU
SAINNOIN
TSETSES
SIN KIANG
KOKO NOR
KWENLUN Mts
Hoang ho or Yellow R.
GULF OF CHIHLI
Korea Bay
Gulf of Liaotung
MANCHURIA
TAIYUAN FU
SIAN FU
KWEI HWA CHENG
KWEI SUI
KWEI TE
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PEKING
TIENTSIN
TSINAN FU
KAIFENG FU
HSUCHOW FU
LANCHOW FU
SINING
TAO CHOU
KUNG CHANG
KANSU
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HONAN
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L/MIL/17/20/1/2

Handbook of China

Vol. II. Kiangsu

IOL/MIL/17/20/1/2


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C.B. 437

A HANDBOOK OF CHINA PROPER

VOLUME II

KIANGSU

JUNE 1917

NAVAL STAFF
INTELLIGENCE DIVISION

NOTE

THIS volume deals with the Province of Kiangsu, or Chiang-su, which lies astride the mouth of the Yangtse.

The contents are broadly subdivided into three sections, in the first of which the physical and economic conditions, the people, the history of the province, the water communications, and railways and roads, are treated in some detail. The second section contains itineraries of routes by land and water throughout the province, and, in some cases where it is obviously convenient, beyond the borders of the province. These itineraries have been critically examined and checked; the authorities in all cases are stated. Section III is a gazetteer of the principal cities and towns.

The map of Kiangsu on the scale 1 : 400,000 is a new work based on the latest available surveys. Some portions are more accurate than others—the information relating to South Kiangsu is fuller and more reliable than that dealing with North Kiangsu—but on the whole it is believed that this map is substantially correct, and a considerable improvement on its predecessors.

The Admiralty will be glad to receive corrections and additions.

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SECTION I

CHAPTER I

GEOGRAPHICAL OUTLINES, CLIMATE AND FAUNA

Physical Geography—The Upland Regions—The Plain of Kiangsu—Lakes—Canals and Embankments—Climate—Fauna.

Physical Geography

The greater part of Kiangsu is flat and low-lying, but on both sides of the Yangtse above Chinkiang and in the south-west of the province there are upland regions of some extent. It is best to begin with a description of these.

The Upland Regions

Going up the river from Shanghai a few detached hills rise from the plain on either side of the river. As Chinkiang is approached the country on the south becomes more hilly. East of the Grand Canal only a few summits rise above the level of the surrounding loess, but west of it the heights become more marked and an upland region, made up of groups of nearly parallel ranges, extends as far up the river as Nanking. This hilly belt has a width from north to south of seven to ten miles and its general trend is from east to west. Most of the ranges rise from 600 to 800 feet above sea-level, but some of the summits attain a height of 1,000 to 1,400 ft. and even more. A terrace of loess from 80 to 200 ft. in height fringes and isolates them on all sides and raises the contour between the various ranges.

To the south of this region lies the basin of the **Chin-huai Ho,** a river which flows into the Yangtse at Nanking. The central part of the basin is low-lying and of alluvial formation, but

its outer margins consist of hilly country which extends to the Yangtse above Nanking in the west, southwards as far as the Hsi-pai Hu (Hsi Hu), and eastwards toward the Grand Canal. The hills here are lower than those on the northern margin already described, and only in isolated places do their summits emerge above the covering of loess which lies over the greater part of the region drained by the river.

To the north of the Yangtse, between Chinkiang and Nanking, an alluvial belt from one to six miles broad lies between the river and a plateau of loess which forms the most important topographical feature of this part of the province as seen from the river. The plateau has an undulating surface but does not much exceed 200 ft. in height. In places truncated cones appear above the loess and reach from 400 to 700 ft. above sea-level. The peculiar features of their outline renders the scenery on the north quite different from that on the south side of the river. Some of the cones are extinct volcanoes, while others appear to be fragments of a volcanic tableland. Opposite Nanking itself there is a low range of hills, probably similar in origin to those on the southern bank.

In the north of Kiangsu only a few upland districts rise above the general level of the plain, and these are of no great importance. Near the coast, not far from the city of Haichow, are the isolated hills of Yün-t'ai Shan, which reach a height of 2,200 ft. Further to the west a range of low elevation, apparently an outline of the Shantung massif, runs southward into the province for some distance and terminates not far from the town of Shuyang. There are also some bare rocky hills of not more than 500 ft. in the north-west of the province.

The Plain of Kiangsu

The remainder of Kiangsu is a plain of alluvial origin built up by the deposits of the **Yangtse,** the **Huai,** and the **Huang Ho.** Of these rivers the Huang Ho, before it deserted its former bed, probably played the most important part, as it flows through the loess districts of China and therefore carries down to the sea a much larger amount of sediment than does



SOUTH KIANGSU : TYPICAL SCENERY

the Yangtse. In such a region as this, change is constantly taking place. On the coast, for example, many of the sand-banks deposited by the Huang Ho in earlier times are probably being washed away by the sea, as that river no longer contributes to their maintenance. In the delta lands of the Yangtse, again, minor changes are always in progress. Material is being removed in one place and deposited in another ; some islands are being destroyed, others extended ; rivers and creeks are gradually being silted up. Probably there is not a seasonal flood but brings about modifications in the existing topography.

Lakes

The greater part of the plain of Kiangsu has emerged from below the level of the sea within comparatively recent geological times ; the slope of the land is gentle and the river system is accordingly not well defined. In such a region lakes are of common occurrence, and Kiangsu is no exception to the rule. South of the Yangtse the largest body of inland water is the T'ai Hu or Great Lake, which is about 40 miles long by 40 broad. In winter it drains to the Grand Canal, but in summer, if the local rainfall is not great, it receives some of the excess waters of the Yangtse. Further to the east a considerable part of the country is covered with a complicated system of lakes of smaller size, lagoons and marshes, which communicate with one another, and either give rise to natural rivers or feed the artificial canals by which this part of the plain is so much cut up. The lakes probably represent former portions of the T'ai Hu which has been reduced in area by the silt deposited by the rivers flowing into it.

North of the Yangtse, in the region between it and the former course of the Huang Ho, the country presents the same general characteristics, though not quite to the same extent. The Hung-tsê lake receives the drainage of the Huai basin and is nearly as large as the T'ai Hu. It lies partly in Anhwei and partly in Kiangsu, and is connected by various channels with the Grand Canal. Its excess waters go either

to the Yangtse by way of the Canal or directly to the sea by various channels which lead from the Canal. To the south-east of this lake but still to the west of the Canal are the Paoying Hu and the Kaoyu Hu which, along with the Hung-tsê lake, act as feeders of the great inland waterway. Further east the largest body of water is the Ta-tsung Hu which drains by various channels directly to the sea. North of the old bed of the Huang Ho the lakes are smaller and less numerous, and the water-courses are much fewer.

Canals and Embankments

Man has also had an important influence on the configuration of the country as it exists to-day. Between the Yangtse and the old bed of the Huang Ho this is particularly clear. The land to the west of the Grand Canal is at a higher level than that to the east of it. Much of the latter has indeed been reclaimed from the sea by human agency, and the polders which have been formed are protected by a great embankment, known as the **Fan-kung-ti,** from the inroads of the sea on their eastern borders. A similar embankment, which however runs much closer to the coast, has been constructed in South Kiangsu. The construction of the **Grand Canal** (see Chapter VIII), again, has affected the natural drainage system of the country to a very considerable extent, and as the Chinese custom is to raise the banks of a canal rather than to dredge its bed, it is obvious that the physical development of the rivers which drain to it is greatly affected thereby. We may also note in this connexion that an intricate system of natural and artificial waterways, designed partly for irrigation and partly for communication, covers the greater part of central and more especially southern Kiangsu.

Climate[1]

With the exception of the extreme northern parts of Kiangsu the climate of the province generally does not differ widely

[1] See also Chapter on Climate in Vol. I, China Proper.

from that of Shanghai. For the greater part of the year it is suitable for military operations, and there is nothing at any season to prevent operations from being carried on. If, however, there is a choice, the period from June to September inclusive should be avoided on account of the heat. The best season of the year is from October to January inclusive, for the weather is then cool, and rain is perhaps less likely to fall than at any other season. In the spring, although the temperature is pleasant, rain is to be expected. Floods are liable to occur in the delta in summer and autumn, making some of the roads impassable. Floods do not affect the navigability of the larger waterways, but may make some of the smaller creeks impassable to boats with a high freeboard, owing to the lowness of the bridges.

Hot weather may occur in May and September, but the real hot season is from June to August. This is also the time of the heaviest rainfall. The mean temperature is then nearly 80° in the neighbourhood of Shanghai, but the nights are very rarely hot enough to prevent sleep.

The cold in winter is not extreme. It usually freezes at night, but the days are often pleasant. The mean temperature for the months of December, January, and February is just under 40°.

In summer the lightest clothing should be worn, and a sun helmet is necessary at least from May to September inclusive. From November to March inclusive a sun helmet is quite unnecessary.

For the winter, warm clothing and four blankets per man should be issued, but furs are unnecessary.

The following statistics are extracted from 'Notes on the Climate of Shanghai', by Père J. de Moidrey, of the Sikawei Observatory. They refer to the climate of the neighbourhood of Shanghai, but there are no great differences in the climate of different parts of Southern Kiangsu, and these details will be found to apply approximately to other places.

Months.	Temperature of average year.			Average diurnal range of temperature.	Average rainfall.		Average cloudiness: 0 = cloudless sky. 10 = completely overcast.	Wind.	
	Max.	Mean.	Min.		Number of days with rain.	Amount of rain in inches.		Mean velocity in miles per hour.	Mean direction.
	°	°	°	°					
January . .	60	37	20	10	10	2·15	6·3	8·4	N. 9° W.
February . .	62	39	23	9	10	2·29	6·8	8·7	N. 8° W.
March . .	74	46	29	12	13	3·21	6·8	8·9	N. 52° E.
April . .	84	56	36	12	13	3·57	6·7	9·3	S. 76° E.
May . .	88	64	46	13	13	3·60	7·0	8·7	S. 55° E
June . .	95	75	57	11	14	6·66	7·4	8·5	S. 53° E.
July . .	98	80	67	9	11	5·10	6·2	8·9	S. 39° E.
August . .	97	80	67	10	11	5·94	5·6	8·4	S. 62° E.
September .	92	72	58	11	12	4·72	6·3	6·9	N. 45° E.
October . .	83	63	41	12	10	3·31	5·8	6·5	N. 31° E.
November .	74	52	30	12	7	1·85	5·1	7·1	N. 8° W.
December .	65	42	22	12	7	1·18	4·7	8·4	N. 23° W.
Year . .	81	59	41	11	131	43·58	6·2	8·2	

Notes on the above Table

Temperature. The highest recorded maximum is 103° F. The lowest recorded minimum is 10° F. The highest recorded minimum is 82° F.

On the average there are only 13 nights in the year when the thermometer does not fall below 77°, and these hot nights scarcely ever occur, except in July and August.

The heat of the summer in Shanghai is only oppressive when the wind blows from the south-west. Wind from this quarter is rare, and on an average only blows for 240 hours in the four hot months, June to September.

The average number of days in the year when the temperature does not rise above freezing-point is 11. Frost occurs on an average on 47 days in the year, and the average total number of hours of frost is 408.

Rainfall: Snow.—Snow is included in the above table of

rainfall. The days shown as ' with rain ' include all those on which any rain or snow fell, so that some might almost have been considered fine.

The amount of rainfall at Shanghai is about half that at Hong Kong, but exceeds that at Peking by 50 per cent.

The winter rain is of a much lighter description than the more tropical rain of summer.

Heavy snow capable of blocking roads or railways does not occur. Some snow falls every year, chiefly in January and February. It rarely lies on the ground for more than 24 hours.

Thunderstorms occur on an average 15 times in the year, almost exclusively in summer.

Fogs occur at the mouth of the Yangtse, especially in the early morning in spring. Inland fogs are not at all common.

In the extreme north of the province the climate is that of the Huang Ho region with its rather severe winters, its dry heat, and its cold wind covering the whole country with dust.

Fauna

Kiangsu, flat, cold and dry in the north, its southern parts warm and moist and intersected with swift-flowing, slow or stagnant waters, is situated at the junction of the two great zoological areas of China, and eminently suited to a large and varied fauna. On the long indented coast-line are found numberless sea-birds: gulls, terns and cormorants, dunlins, knots and sandpipers. The sea and the inland waters abound with excellent fish and support a thriving industry. Owing to the dense population this province is very poor in carnivorous animals—just a few wolves and bears, a number of foxes, and the *mustelidae*. Hares are numerous and roebuck, Michie's deer and the Chinese water-deer (*Hydropotes inermis*), which find abundant cover in the fields of wheat, barley, beans and paddy, and in the broad belts of sedge bordering the pools.

In these havens and the bamboo brakes are crowds of small birds. Munias and mynahs (*Acridotheres cristatellus*), sparrows and hedge accentors, bullfinches, hawfinches and the Chinese

chaffinch, the leiothrix and redstart, wagtails and *Budytes flavus*, flycatchers of various species including *Ixus sinensis*, titmice and *Suthora webbiana*, the crow-tit used for fighting in Shanghai.

The Chinese *Zosterops* is the most remarkable of many thrushes and blackbirds. China is poor in singing birds, but it has in winter *Oticoris sibirica*, as fine a songster as the English lark.

Swarms of swallows, *Drongos*, nightjars, and four species of shrike frequent the reeds. The Chinese crow, the blue crow, and the Chinese blue pie bring us naturally to the carnivorous birds of prey, kestrels, merlins, goshawks, sparrow-hawks, owls, the kites dusky and *pallidus*, the golden eagle, and the white-tailed eagle and osprey which frequent the coast.

Cranes, common and Manchurian, some few *leucachen* and many demoiselles, storks, egrets (*Ardea garzetta*), white and night herons, spoonbills, lapwings, curlews, bustards, bitterns, abound in winter; and lastly the game birds make Central and South Kiangsu a sportsman's paradise. The ring-necked pheasant is found all the year round, though foreign public opinion opens the shooting season on October 1st for them and for the bamboo partridge, woodcock, quail, and winter snipe (*Gallinago caelestis*).

Swinhoe's snipe (*Gallinago megala*) and the pin-tailed snipe (*G. stenura*) come about the end of August and are caught again when returning in spring.

At the beginning of December the wild fowl arrive from the Amur lands; swans *musicus minor* and *bewicki*, geese *cinereus* and *segetum*, and swarms of duck. Mallard (*Anas boschas*), teal, common, spectacled and falcate, widgeon, shoveller, ruddy sheldrake (*Casarca rutila*), golden-eye, pin-tail, and velvet scoter are the most general. Garganey teal, gadwall, and spot-billed ducks also occur, as do the goosander and the red-breasted merganser.

CHAPTER II

HISTORY

Feudal Period: Foundation of Soochow, 513 B. C.—Grand Canal, 486 B. C. Middle Period: The Han Dynasties—The Three Kingdoms—Chin Dynasty—North and South Dynasties—Sui Dynasty—T'ang Dynasty—Sung Dynasty—Yüan Dynasty—Ming Dynasty—Manchu Dynasty—Modern Period: First China War, 1840–2—Treaty of Nanking, 1842—T'ai-p'ing Rebellion—'Chinese' Gordon—Recent History.

KIANGSU has only existed as a separate province since the year 1667, in the reign of K'ang Hsi, and the name then given to it was derived from those of its two principal cities, *Kiang*-ning (or Nanking) and *Soo*chow. Previous to that date the present Kiangsu and Anhui both formed part of the Province of Kiangnan.

Geologically considered, the greater portion of Kiangsu is an alluvial plain, formed by the silt of China's two great rivers: the Huang Ho in the north and the Yangtse in the south. In prehistoric times the delta of the Yangtse extended back as far as Wuhu, and the river seems to have found an outlet into the Ch'ien-t'ang estuary by way of the T'ai Hu. Even in the early historic period the configuration of the coast was doubtless very different from what it is now. Only the northernmost part of Kiangsu was occupied by the Chinese race at the dawn of their history, but the legendary Yellow Emperor is credited with having extended his dominion as far south as the Yangtse. Some centuries later the Great Yü (*circa* 2200 B. C.) is said to have 'drained the Empire' and protected it against floods. Some of his work may have been done in the neighbourhood of modern Soochow; at any rate, it is noteworthy that he was overtaken by death and buried in the extreme south of his realm, at Kuei-chi in Chekiang.

Feudal Period

Little, however, is really known about Kiangsu until the feudal period, when China was divided up into a large number of practically independent States. The semi-civilized State of **Wu,** which appears to have comprised nearly the whole of modern Kiangsu, besides part of Chekiang and southern Anhui, is first mentioned by the *Spring and Autumn Annals* under the year 584 B.C. It was then already at variance with its powerful neighbour **Ch'u,** the inhabitants of which were mostly non-Chinese aboriginal tribes, and which in the seventh century B.C. had extended her sway eastwards from Hupeh over large tracts of Anhui and Honan. Between these two States desultory warfare went on until the reign of Ho Lu (514–496 B.C.), when the genius of **Wu Tzŭ-hsü,** a fugitive from the Ch'u State, raised Wu with startling rapidity to a great height of military power.

Foundation of Soochow, 513 B.C.

When Ho Lu succeeded to the throne, Wu Tzŭ-hsü became Prime Minister and, being entrusted with the task of laying out a new capital, founded the beautiful city of Soochow in 513. Four years after this an invading army from the Ch'u State was signally defeated, and in 506 Wu Tzŭ-hsü in his turn attacked Ch'u, won a decisive battle, and entered Ying, the enemy's capital (near the modern Kingchow on the Middle Yangtse), in triumph. This wonderful march into the very heart of China made a deep impression on the surrounding states, and the power and prestige of Wu were now at their zenith. It was about this time that Sun Wu, an officer in the service of Ho Lu, produced his famous treatise on the Art of War, which is still extant.

The intervention of the **Ch'in** State soon compelled Wu to evacuate Ying and to turn her attention to a new rival in the south. This was the State of **Yüeh,** occupying parts of Chekiang, Kiangsi and Fukien, and inhabited, like her neighbours, by a people that had only half emerged from

a state of barbarism. In her first serious encounter with this rising Power Wu was badly worsted, and King Ho Lu himself mortally wounded. This disaster was amply avenged two years later (494) by his son and successor Fu Ch'ai, who defeated Kou Chien, King of Yüeh, in a great battle, and took possession of his capital. But the very magnitude of this success led to Wu's decline and ultimate overthrow; for while Fu Ch'ai contented himself with exacting homage from the vanquished monarch, the latter, with undaunted spirit, at once set himself to reorganize the military resources of his kingdom.

Grand Canal, 486 B.C.

Under the year 486 B.C. a brief but important notice occurs in Tso's Commentary to the *Annals* :—' This autumn, Wu built a wall round the city of Han (the present Yangchow) and formed a channel of communication between the waters of the Yangtse and Huai rivers.' This, the most ancient section of the Grand Canal, was repaired and enlarged in the third century A.D. Meanwhile, **Shih Huang Ti** (221–210 B.C.) had dug a canal from Chinkiang to Changchow; and the whole of the southern section, between the Yangtse and Hangchow, was completed in the reign of Yang Ti of the Sui dynasty (A.D. 605–617). The third and longest section, from the old bed of the Yellow River at Tsingkiangpu to Tientsin, was cut by the Mongol Emperor Khubilai in the years 1280 to 1283. We know that there must have been a fairly extensive system of canals throughout Kiangsu at an early date, inasmuch as the people of Wu are spoken of as possessing a fleet, with which they attacked both Ch'u on the west and Ch'i in the north. The most ancient canal of which we hear—that connecting Wusih and Changshu Ku—is said to date from the very beginning of the Chou dynasty (about 1200 B.C.).

The death of Wu Tzŭ-hsü in 484 materially furthered Kou Chien's schemes of revenge. Soon after that event he found himself sufficiently strong to throw off the mask and resume hostilities, though it was not until the year 473 that

Soochow was captured and Wu finally incorporated in the kingdom of Yüeh. In 334 Yüeh in her turn fell a prey to the kingdom of Ch'u, which was able to retain her new possessions until 223, when she was conquered and annexed by the Ch'in general Wang Chien. Two years later the King of Ch'in assumed the title of First Emperor and ruled over a united China.

In the troublous times which accompanied the break-up of the Ch'in dynasty, Kiangsu was again the scene of great military events. In 209 **Liu Pang,** the headman of his district in North Kiangsu, who had struck against an oppressive *corvée* ordered by the Emperor, rose in open rebellion and assumed the title of Duke of P'ei. In the same year Hsiang Liang, with his headquarters at Soochow, succeeded in making Ch'u once more an independent kingdom. His nephew Hsiang Chi prevailed upon the Ch'in general Chang Han to surrender with his whole army, and proclaimed the King of Ch'u as Emperor, he himself becoming king of Ch'u and at the same time chief over the other kings. His capital was fixed at P'êng-ch'êng, the modern Süchowfu. It was here that, in 205 B. C., he fought a sanguinary battle with his great rival Liu Pang, now the ruler of Western China, who lost over 100,000 men and himself escaped only by a miracle from the field. A long struggle followed, ending in a treaty of peace, which Liu Pang at once proceeded to violate ; he started in pursuit of Hsiang Chi and inflicted upon him a crushing defeat, whereupon the latter committed suicide, and Liu Pang was proclaimed first Emperor of the Han dynasty in 202 B. C.

Two other famous men of this period were also natives of North Kiangsu. One was Hsiao Ho, who from the very first attached himself to the fortunes of Liu Pang as his most intimate friend and adviser. The other was Han Hsin, the greatest captain of his day, who was born at Huai-yin (the modern Hwaianfu). He served successively under Hsiang Liang, Hsiang Chi, and Liu Pang, and his series of campaigns against various states are among the most brilliant in Chinese

military annals. In 201 he was created Prince of Ch'u, which then, of course, included Kiangsu, but he was afterwards degraded to the rank of Marquis of Huai-yin.

Middle Period

The Han Dynasties

During the 400 years covered by the Earlier and Later Han dynasties, marked chiefly by the struggle with the **Hsiung-nu** or **Huns** in the north-west, the seaboard of China was left in comparative peace. Towards the close of the second century A.D. the 'Yellow Turbans' rebellion shattered the framework of the empire, and civil war raged almost continuously for a hundred years. Owing to the geographical position of Wu, as well as to the shrewd and cautious policy of her rulers, the wars in which she engaged were mostly defensive in character, and she suffered considerably less than her neighbours. When the first outbreak occurred, Sun Chien held sway in the south as Governor of Ch'ang-sha. He joined Ts'ao Ts'ao in opposing the arrogant pretensions of Tung Cho, who in 190 had deposed and murdered the reigning Emperor, but was slain in battle and succeeded by his son Sun Ts'ê. The latter was invested with the title of Marquis of Wu, and died shortly after. The work of his father and brother was ably carried on by **Sun Ch'üan** during a most critical period.

The Three Kingdoms

Of the several aspirants to supreme power, Ts'ao Ts'ao had made himself master of a large part of northern and central China, afterwards to become the kingdom of **Wei.** He was opposed by Yüan Shao in Shantung and also by Liu Pei, one of his former lieutenants. Sun Ch'üan threw in his lot with Liu Pei, and their united forces overcame Ts'ao Ts'ao's huge army in the battle of the Red Ridge in 207. Liu Pei now withdrew to Szechwan, where he founded the independent kingdom of **Shu,** and after some years of hard fighting Sun Ch'üan was obliged to sue for peace. Not only did he

swear allegiance to Ts'ao Ts'ao, but he also captured and put to death Liu Pei's comrade-in-arms Kuan Yü (now worshipped as the God of War). This act involved him in war with his former ally, but on the other hand he was recognized as King of Wu in 221 by the Emperor of Wei. After waging successful campaigns first against Liu Pei and then against the Emperor of Wei, who was alarmed by the new treaty of amity concluded between his two rivals, Sun Ch'üan finally assumed the title of Emperor of Wu, which he held until his death in 252. His capital was at Nanking, then called Chien-yeh.

Chin Dynasty

The natural barrier of the Yangtse enabled Wu to maintain her existence for fifteen years after the downfall of Shu and Wei, and the establishment of the Chin dynasty. In 280, however, Sun Hao, the grandson of Sun Ch'üan, was deposed, and Wu once more merged in the Empire. Sun Hao, it is interesting to note, is the first who is known to have used tea as a beverage.

North and South Dynasties

During the succeeding dynasties of the south, down to 589 A.D., Nanking continued to be the capital. In 403 the rebel Huan Hsüan surprised the city and proclaimed himself Emperor of Ch'u, but was defeated by Liu Yü, a native of the modern Süchowfu, who marched from Chinkiang to meet him. Liu Yü eventually became the first Emperor of the Liu Sung dynasty. In 581 Yang Chien seized the throne of the northern Chou kingdom, and a few years later he sent his generals south to annex the Empire of Ch'ên. Nanking was captured, and North and South China were thus reunited under the sway of the Sui dynasty.

Sui Dynasty

The capital was now transferred to Ch'ang-an (Sianfu), and in 605 it was connected with Chiang-tu (Yangchow) by a canal

40 paces in width, with a towing-path planted with willow-trees. Enormous sums were spent on the adornment of Chiang-tu by the second Sui Emperor, **Yang Ti,** who was assassinated there in 618.

T'ang Dynasty

His death was the signal for the appearance of numerous pretenders to the Imperial throne, but one by one they were defeated by the exertions of Li Shih-min, the virtual founder of the T'ang dynasty, though his own reign did not begin until 627. The State of Wu was again incorporated in the Empire in 621, and for nearly three centuries its annals remained happily dull, though the province was ravaged during the rebellion of Huang Ch'ao in 881.

No sooner had the last T'ang Emperor disappeared from the scene than a fresh partition of China took place. Yang-chow, then at the height of its splendour, was the nucleus of a new kingdom of **Wu,** which came to embrace all the land watered by the Huai, and bounded by the sea on the east, by the Yangtse on the south, and by Wu-ch'ang on the west. Out of Chekiang and South Kiangsu was formed the kingdom of **Wu Yüeh.** Wu did not long remain an independent state : in 937 it was absorbed by the Nan T'ang (Southern T'ang) State, set up by the minister Hsü Chih-kao, who assumed the Imperial title. His son, however, was obliged to yield all his possessions north of the Yangtse and acknowledge the sovereignty of Chou.

Sung Dynasty

In 970, when the first Sung Emperor was steadily extending his sway, Nan T'ang took the less ambitious name of **Kiangnan** as a conciliatory measure ; but its existence was still considered a menace, and the general Ts'ao Pin was sent to reduce Nanking. This was accomplished in 975 after a twelve months' siege, whereupon all the other districts of Kiangnan surrendered. Two years later, the King of Wu Yüeh also

voluntarily handed over his territory. At the close of the century, the Empire was for the first time divided into 15 provinces, one of them being Kiangnan.

China's chief bane during the Sung dynasty was the ever-increasing pressure of Tartar tribes—first the Khitans, then the Chins, and finally the Mongols—on her northern frontiers. The final destruction of the Khitan power in 1122 was soon followed by a rupture between the Chinese and their formidable allies. In spite of a gallant stand by the general Tsung Tsê, the onrush of the **Chin** armies proved irresistible, and the capital was successively transferred from Kaifeng on the Yellow River to Yangchow, Chinkiang, Hangchow, Ningpo, and finally to an island off the coast of Taichowfu. In 1129, Yangchow was taken and burned ; Nanking and Hangchow shared its fate a few months later, but the enemy's further progress was checked by the heroic resistance of Chang Hsün and Yo Fei. A naval battle on the Yangtse also turned to the invaders' disadvantage. Having laden themselves with loot, they forced their way back through Pingkiang and Changchow, and prepared to return home. At Chin Shan, an islet in the river near Chinkiang, they found a Chinese fleet under the command of Han Shih-chung. A desperate battle, in which the Tartars fared badly, was fought at Huang-t'ien-tang. For 48 days the passage was contested, and at the end of the time the Chins still found themselves on the south side of the river. At length they gave up the struggle and retreated to a point near Nanking, where the crossing was effected without opposition.

By a treaty concluded in 1142 Kiangnan remained in the hands of the Chinese, but in 1161 a formal demand for its cession was made by the Chin Emperor Wan. This being refused, a huge invading army marched south, but was driven back with great slaughter, and Wan himself was soon afterwards assassinated in his camp at Kwachow. Other raids followed, and in 1165 the Chins were able to take possession of the Hwaian district in North Kiangsu, from which, however, they retired again when peace was established.

Yüan (Mongol) Dynasty

About a century later, a new and still more dangerous foreign foe was pouring over Central China like a flood. The **Mongols** under Bayan, coming down the Yangtse, reached Nanking in 1275. The city, which was ravaged by famine and pestilence, capitulated with hardly any show of resistance, and was treated with great kindness and consideration by Bayan. Very different was the fate of Changchow Ku which, on being recaptured by the Chinese, refused to surrender a second time. When the city fell, all the inhabitants were put to the sword. After this, though Yangchow still held out for a while, the whole of the province was overrun by the Mongols, and remained, with the rest of China, under their dominion until the Ming dynasty. Once established, however, the Mongol rule does not seem to have been very harsh. It is significant that in 1287 Confucian schools were opened in all districts of Kiang-nan. During this period, Marco Polo, the Venetian traveller, acted for three years as Governor of Yangchow on the appointment of Khubilai Khan.

Ming Dynasty

As the power of the Mongols declined, and their government grew weaker, the usual rebellions broke out in various parts of the Empire. Chang Shih-ch'êng, a salt-trader, raised the standard of revolt in 1353, and after capturing Taichow Ku proclaimed himself Prince Ch'êng of Chou. In the following year he made an unsuccessful attack on Yangchow, but in 1356 he got possession of Soochow and Hangchow. Fear of the rising power of **Chu Yüan-chang,** the future founder of the Ming dynasty, who in the meantime had taken Nanking, drove him back to his allegiance; but he still remained practically independent, and in 1363, after further successes in Anhwei, he took the title of Prince of Wu, and refused to forward the tribute rice. The Ming leader also styled his State Wu, and in 1367 attacked Chang Shih-ch'êng, who was defeated and committed suicide. Nanking now once more

became the capital of the Empire, which was divided into 15 provinces, Kiangnan being known as 'the south metropolitan province'.

On the death of the first Ming Emperor the throne was left to his grandson, who at once set to work to deprive his uncles of their domains. But the **Prince of Yen** in the north proved too strong for him. He marched south with a large army through Shantung and the valley of the Huai, and captured Yangchow. The commander of the fleet at Kwachow, whose business it was to prevent the rebels from crossing the Yangtse, surrendered. His example was followed by the commandant of the city of Chinkiang. Nanking was the next city besieged. The young Emperor acted bravely, but was not supported by his generals, one of whom opened the gates to the Prince of Yen. Upon entering the city, the Prince found the Imperial palace in flames, but the Emperor had disappeared, and nothing is known with certainty as to his fate. The new monarch was among other things a patron of literature; he ordered the compilation of a gigantic encyclopaedia, completed at Nanking in 11,100 volumes, and named after his reign-title *Yung Lo Ta Tien*. It was never printed, and only some hundred odd volumes belonging to one of the manuscript copies still survive. In 1421 he moved his capital to Peking, which from that time forth has continued to be the capital of China.

As early as the beginning of the Ming dynasty it was found necessary to station garrisons along the coast in order to protect it against the raids of **Japanese** pirates. By the middle of the sixteenth century their audacity had grown to such a pitch that all trade between China and Japan was suspended, and great military preparations were made in Kiangnan and Chekiang. In 1554 Chang Ching, President of the Board of War at Nanking, was appointed commander-in-chief of all the forces sent against the Japanese. He wisely refused to give battle until his forces had gathered. But this precaution on his part was reported to Peking by an enemy as evidence of his cowardice. Although he gained an impor-

tant victory over the Japanese afterwards, when his reinforcements arrived, he was put to death, and his accuser appointed in his stead. The latter, however, was by no means equal to the situation ; the Japanese actually penetrated as far inland as Nanking, and returned with immense booty to their ships, which were anchored off the island of Chusan. At times they suffered reverses, but they were only driven out of one place to appear in another along the extensive coast-line between Shanghai and Canton. After 1563 Kiangsu appears to have been little troubled with them.

When Peking and the north of China fell into the hands of the Manchus, the only hope left for the national dynasty was to establish an empire south of the Yangtse, after the manner of the Sungs ; and this is exactly what was attempted by **Shih K'o-fa** and other military magnates at Nanking, where they set up Prince Fu, brother of the last Ming Emperor, as his successor, refusing all overtures from the Manchus. Unfortunately this prince proved utterly unfit for the position he held at this critical time. The Manchu army, with a number of heavy guns, was soon marching south. Shih K'o-fa threw himself into Yangchow, then, as before, the key to Nanking, and was advised to make a breach in the canal and swamp the enemy's camp. This he declined to do on the ground that more Chinese than Manchus would perish. He held that the interests of the people should be considered superior to those of the dynasty. After a brief struggle the city was taken by assault, and Shih K'o-fa slain. Nanking fell shortly afterwards, and Prince Fu was executed. By the end of 1645 the whole of Kiangsu had been subdued.

Ch'ing (Manchu) Dynasty

Perhaps the most formidable opponent of the new régime was the great sea-lord Chêng Ch'êng-kung, better known to Europeans as **Koxinga,** who for many years harried the maritime provinces of the south with relentless persistency. At one time he had under his command as many as 50,000 sailors, 100,000 soldiers, including a large proportion of cavalry, and

some 20,000 auxiliaries. With these forces he made two attempts to seize Nanking. The first expedition was a complete failure owing to bad weather, but on the second occasion, in 1659, he sailed up the Yangtse, landed an army near Chinkiang, and routed, at Yang-p'êng Shan, a large force that had been arrayed against him. Chinkiang was taken and the vicinity of Nanking was reached. One of his lieutenants suggested to him that he should march immediately to Yangchow so as to threaten the communication between Shantung and the south; but Koxinga rejected this sound piece of advice, and sustained a severe defeat before the walls of Nanking, which compelled him to retire to his headquarters in Amoy. He never ventured to bring his fleet north again, but founded a new kingdom for himself in the island of Formosa.

Modern Period

First China War, 1840–2

The wars and rebellions which punctuated the reigns of K'ang Hsi and his immediate successors left Kiangsu practically untouched, and it is not until the **Opium War** that it comes again into historical prominence. In May, 1842, a British fleet with transports, under Sir W. Parker and Sir Hugh Gough, lay off Chapu, a port in northern Chekiang. The futility of operations along the coast as a means of bringing the Chinese Government to reason had at last been recognized, and it was decided to make a demonstration of our naval superiority by an expedition up the Yangtse. Woosung, at the mouth of the Huang-p'u River, which had been strongly fortified, was the first obstacle that presented itself. It was taken after a fierce struggle; and Shanghai, then only a third-class Chinese city, was also occupied by us for a short time. On July 6 the expedition started from Woosung, and a fortnight later 70 ships lay anchored abreast of Chinkiang. The most stubborn resistance was met with here; the troops encamped outside the city fled, it is true, but the Manchu garrison fought most heroically, losing a third of their num-

bers in killed and wounded. The British losses were also heavy. On August 3 the fleet again got under way and reached Nanking on the 9th. In two days everything was ready for an assault, when the Chinese signified their readiness to submit.

Treaty of Nanking, 1842

A treaty of peace was signed on board H.M.S. *Cornwallis* between Sir Henry Pottinger on the one side and three Manchu Commissioners on the other. Shanghai was one of the five ports then opened to foreigners for trade and residence, and at once began to develop with astonishing rapidity.

T'ai-p'ing Rebellion

Early in 1853 Kiangsu was invaded for the first time by the T'ai-p'ing rebels, who had swept with irresistible force across Hunan, Hupeh, and South Anhwei. Nanking was carried by storm, and in another month the insurgents captured Chinkiang, Yangchow, and Kwachow, which gave them complete control not only of the Yangtse River but also of the Grand Canal. From March 19, 1853, to July 19, 1864, Nanking was the T'ai-p'ing capital. **Hung Hsiu-ch'üan,** the leader, proclaimed himself Emperor, and five of his chief adherents were made Princes (*Wang*). Both Chinkiang and Nanking were soon invested by the Imperialist troops, but a young and able officer, who afterwards became **Chung Wang** (Loyal Prince), relieved the pressure on Chinkiang, and subsequently routed the Imperialists round Nanking itself. In September, 1853, there was a sympathetic rising at Shanghai, promoted by the Secret Society of the Triads, who were able to hold the native city for nearly a year and a half. The encampment of a strong Imperialist force just outside the foreign settlement led to the so-called battle of Muddy Flat on April 4, 1854, in which a handful of English and American bluejackets and volunteers, aided by a timely advance on the part of the insurgents, succeeded in driving off the Imperialists. In the same year a new set of regulations was drawn up which still

forms the basis of the administration of the Settlement at Shanghai. A municipal council was elected, and at the same time the Chinese customs were placed under foreign control.

Meanwhile internal discord had much weakened the T'ai-p'ings, who were fast degenerating into a mere horde of robbers held together mainly by hopes of plunder. In December, 1857, Chinkiang was taken from them ; and, by the autumn of 1858, they had lost most of their possessions in the Yangtse Valley, excepting the two strongholds of Anking and Nanking and the strip of land between them. It is probable that the whole revolutionary movement would have collapsed but for the outbreak of war with England and France. As it was, the energy of Chung Wang forced the Imperialists to retire to a more respectful distance from Nanking, while his colleague Ying Wang brilliantly raised the siege of Anking. It is true that Tsêng Kuo-fan and Chang Kuo-liang succeeded in investing the T'ai-p'ing capital once more, but Chung Wang himself escaped from the city, and in the early part of 1860 created a sudden diversion by appearing with a large force before Hangchow. Chang Kuo-liang fell into the trap and dispatched some of his best troops to the rescue. Chung Wang, however, did not wait for their arrival ; he returned by forced marches to Nanking, and in concert with the T'ai-p'ings in the city fell upon the now enfeebled Imperialist army with extraordinary ferocity. The result was a great victory in which the besiegers were driven from their positions with the loss of all their guns and equipment and more than 5,000 men. Two months later the rebels had overrun nearly the whole of South Kiangsu and part of Chekiang. Soochow was captured, and Shanghai itself was for some time in a precarious position, being only saved by the protection of British and French troops.

In these straits the Chinese turned for help to the foreigner, and a small heterogeneous force of Europeans and Manila men was organized, which, under the command of the American, Ward, succeeded in recapturing Sungkiang. This force, which seems never to have consisted of more than 5,000 men, and at first numbered only a few hundred, obtained by Imperial

decree in 1862 the high-sounding title of the Ever Victorious Army. In May of that year, through a clever stratagem of Chung Wang's, a great disaster befell the Imperialists besieging Taitsang, no fewer than 5,000 of their number being left on the field. On the other hand, Nanking was once more hard pressed by Tsêng Kuo-fan's army, and in November a large rebel force marching on Kiating was intercepted and heavily defeated by Li Hung-chang, the new Governor of Kiangsu, and Burgevine, an able but unscrupulous soldier of fortune who had succeeded Ward in his command.

'Chinese' Gordon

In February, 1863, the Ever Victorious Army, led by Captain Holland, suffered its first serious reverse in an attempt to storm Taitsang, and at the request of Li Hung-chang the command was then given to Major Gordon of the Royal Engineers. Under his brilliant leadership the main strongholds of the rebels in Kiangsu were reduced one after another. Changshu Ku was relieved, and Taitsang captured at last, but perhaps the turning-point of the war came when Gordon, supported by the shallow-draught gunboat *Hyson*, gained a sweeping victory before Kunshan, which henceforth became his headquarters. After much fighting and complications resulting from the treachery of Burgevine, who went over to the T'ai-p'ings, Soochow was invested, though Chung Wang's army at Wusih still served to keep open communications by means of the Grand Canal. The Lou Gate stockades were taken on November 29, 1863, and Soochow itself was surrendered a few days later. The T'ai-p'ing Princes in the city were treacherously slain by the order of Li Hung-chang, which caused Gordon to throw up his command in disgust. He was induced to resume it, however, for urgent military as well as political reasons.

From Nanking down to Hangchow the rebel forces were now grouped roughly in the shape of an hour-glass, the neck being at Ihing and Liyanghsien, close to the western border of the T'ai Hu. Gordon's plan was to cut these forces in twain,

and this he succeeded in doing by a sudden dash on Ihing, though a further attack on Kintan Ku in the north was repulsed. Meanwhile, the rebels were defeated in the south, and after the loss of Changchow Ku only Nanking remained to them. In June its plight was such that the T'ien Wang (Hung Hsiu-ch'üan) committed suicide in despair. On July 19 a great breach was made in the wall through which Tsêng Kuo-fan's army rushed in. The once superb city lay in ruins, even the famous Porcelain Pagoda having been destroyed. Chung Wang defended the place to the last, but was ultimately taken and executed with some seven thousand followers. Thus the greatest rebellion that the world has known came to an end.

Recent History

The recent history of Kiangsu has been comparatively uneventful, being intimately bound up with the phenomenal growth and prosperity of **Shanghai.** In 1862 the French concession was withdrawn from the municipal system set up in 1854, but in the following year this was more than counterbalanced by the incorporation of Hongkew, which rapidly developed into a populous bustling district lined with wharves and warehouses on the river front. The Mixed Court was established in 1864, with civil and criminal jurisdiction not only over the Chinese but also over foreigners without consular representatives in the Settlement. The suppression of the T'ai-p'ing rebellion was the indirect cause of a great commercial crisis, when six out of eleven foreign banks suspended payment, but fortunately this was soon followed by a truly golden era for the silk and tea trades. A railway line connecting Woosung and Shanghai (the first seen in China) was laid in 1876 (see Chap. IX), but the whole line was purchased by the Chinese Government, which promptly had the rails torn up and shipped off with the rolling stock to Formosa. Twenty years later the line was rebuilt, and now connects Woosung with Nanking. The neutrality of Shanghai was respected during the Franco-Chinese hostili-

ties of 1885, the war with Japan and the Boxer rising, as well as the Revolution of 1911. Early in 1905, Kiangsu was divided into two provinces, South and North Kiangsu (or Kianghwai); but the division proved unpopular, and after lasting about three months it was revoked. Soochow and most of the other cities of Kiangsu that were wrecked by the T'ai-p'ings have regained their normal prosperity. Nanking, which has passed through so many vicissitudes, was again the scene of fighting in 1911. It was besieged by the Revolutionaries, and fell on December 2. It was there that the Revolutionary Convention elected Dr. Sun Yat-sen first President of the Republic of China.

CHAPTER III

THE PEOPLE OF KIANGSU

Population—Language—Religion—Education—Hygiene.

Population

According to the 1910 census the population of Kiangsu was 17,300,000, with an average distribution of 448 to the square mile. The actual distribution, however, is irregular, an exceptional density occurring in the districts south of the Yangtse and in the delta formed by the mouths of that river.

North Kiangsu, which is known as Chiang-pei because it lies 'north of the river' Yangtse, is inhabited by a purely Chinese people, who are for the most part poor and engaged in agricultural pursuits. The men are 'of fairly large stature, moderate opium smokers, and on the whole friendly to foreigners'. Richard (*Comprehensive Geography of the Chinese Empire*, p. 157), however, states that 'the inhabitants of Süchowfu, in the extreme N., differ vastly in general characteristics and in manners from the rest of the Province'. They are, he says, 'rude, sturdy and turbulent. Many of these Northerners have a rather prominent nose, sometimes even aquiline, while the cheek-bones do not protrude, and the eyes are not almond-shaped.' It should be added that in the vicinity of Tsingkow men often have reddish instead of the usual black hair.

South Kiangsu, which is known as Chiang-nan ('south of the river'), is densely populated, especially in the eastern districts, where the average in places exceeds 1,000 to the square mile. The people are pure Chinese. They are said

to be more effeminate and less robust than the inhabitants of the neighbouring provinces; but on the other hand they are more intellectual. On the whole they are a peaceful and law-abiding people. The land in the Yangtse delta is cultivated to the last yard.

Language

Speaking broadly, the Northern Mandarin dialect (*Kuan hua*) is used throughout Chiang-pei or that part of Kiangsu which lies north of the Yangtse. The principal exceptions to this general rule are Yangchow, which has its own variety of the Mandarin, and the Haimen promontory, where the Shanghai dialect is spoken.

In Chiang-nan or South Kiangsu a great variety of dialects are used, the extremes being the Shanghai or Sungkiangfu vernacular, and the Southern Mandarin, which is spoken at Nanking. Thus, going west from Shanghai a distinctive dialect is met at Soochow, and another at Wusih, and so on to Chinkiang, where the influence of the Southern Mandarin begins to be felt. These dialects and the many intermediate varieties are not divided by any well-defined boundaries, but insensibly merge into each other, though the extremes are widely divergent. The Sungkiangfu or Shanghai dialect is one of the Wu dialects, and is spoken by many millions of people.

English is spoken to a certain extent by the educated classes in the Treaty ports, and pidgin-English by the less educated traders.

Religion

The general note on religions in China (vol. I) is applicable to the province of Kiangsu, and need not be repeated. In addition to the great mission centre of Shanghai, where there are several hundred workers, the *China Mission Handbook for 1914* gives 21 mission centres in the province of Kiangsu, viz.:

Antung	where there are			4	women workers
Changchow	,,	3	men and	5	,,
Chinkiang	,,	11	,,	18	,,
Haichow	,,	3	,,	3	,,
Hinghwa	,,	5	,,	4	,,
Hwaianfu	,,	2	,,	4	,,
Kiangwan	,,			3	,,
Kiangyin	,,	4	,,	8	,,
Liuho Ku	,,	2	,,	3	,,
Nanking	,,	51	,,	77	,,
Soochow	,,	28	,,	57	,,
Süchowfu	,,	6	,,	6	,,
Sungkiangfu	,,	2	,,	9	,,
Sutsien	,,	4	,,	6	,,
Taichow Ku	,,	2	,,	1	,,
Tsingkiangpu	,,	5	,,	9	,,
Tsingpuhsien	,,			1	,,
Wusih	,,	3	,,	6	,,
Yangchow	,,	9	,,	38	,,
Yencheng Ku	,,	2	,,	2	,,
Zangzok (60 miles NW. of Shanghai)	,,	1	,,	2	,,

The women workers include the wives of the men missioners.

The *China Inland Mission Atlas*, in its list of Protestant mission stations in Kiangsu in 1908, gives the following additional stations: Changshu Ku, Ihing, Kaoyuchow, Kiatinghsien, Kunshan, Nansiang, Sinchang, Tsangyen (?), Tungchow, and Woosung; besides Kongwan, Santingko, and Sinza in the Shanghai district.

Education

The educational system in operation in Kiangsu does not differ from that prescribed for the whole of China: see general article on Education in vol. I. Here, as elsewhere, the old Chinese scheme of instruction, based on the Chinese classics, has been superseded by the modern system which belongs to

the twentieth century, although China may still be said to be in a transition stage in this respect.

The modern education aims at a progressive training from elementary or primary schools to university, extending from the age of 7 to 24. The first four years in the primary school should be a period of compulsory education carried out in the schools which every locality is called upon to provide.

Schools of higher grade are to be found in the larger provincial towns, and numerous educational establishments are centred in Nanking and Soochow. At Nanking there is a normal school, a college, a school of agriculture, a polytechnic, a middle school, school of law, &c.; at Soochow a normal school, a college, a school of agriculture, and a polytechnic.

In addition to the government schools, a large number of private schools and colleges have been opened in large towns and important centres by local gentry, leading merchants, and foreign missions.

Foreign effort is conspicuous in the neighbourhood of Shanghai, as evidenced by the Anglo-Chinese College, the Medhurst College, the Baptist College, and St. John's University, besides which the famous Roman Catholic University at Sikawei, 5 miles SW. of Shanghai, includes a university, college, and industrial schools, and maintains in addition 50 other schools in and around Shanghai. There is a Protestant university at Nanking and at Soochow.

Hygiene

South Kiangsu.—Although the ordinary tropical diseases are met with, the country is by no means unhealthy, unless perhaps towards the close of the hot season, during the months of August and September.

Small-pox, however, is very prevalent, and vaccination should be insisted upon.

Cases of cholera occur annually. The disease has not for many years become epidemic.

Enteric fever, dysentery, and malaria are the most common

forms of illness : enteric is frequent in autumn, dysentery and malaria in the summer.

A peculiar disease called ' the sand ' is said to occur in Nanking, its name being derived from little blackish pimples, resembling grains of dust, which cover the skin.

Sunstroke is frequent during the hot weather, during which period no man should be allowed to go out in the sun who is suffering from even mild fever, or who has consumed much intoxicating liquor.

Venereal disease is very prevalent.

The uplands in the west are on the whole more healthy than the delta, but Nanking has a bad sanitary reputation, probably owing to the contamination of its water-supply and to the surrounding marshes.

North Kiangsu.—No information is available about diseases in Northern Kiangsu. Malarial fever does not seem to be very prevalent, and the climate is probably healthy.

See also general remarks on this subject in Vol. I.

CHAPTER IV

ECONOMIC GEOGRAPHY

Natural Regions (South Kiangsu, Yangtse to Old Yellow River, and Old Yellow River to Shantung)—Forests—Manufactures—Trade.

KIANGSU is one of the smallest provinces in China—the area is 38,600 square miles—but is at the same time one of the most densely populated. Its alluvial soils, favourable climate, and facilities for irrigation form the basis of a highly developed system of intensive cultivation, while its position in the lowlands near the mouth of the Yangtse has encouraged the growth of many large industrial and commercial towns. Commanding as it does easy access to the sea on the one hand, and numerous land routes on the other, its seaports include the most important in the country.

NATURAL REGIONS

South Kiangsu

The whole province may be divided into three natural regions. The first lies to the south of the Yangtse and belongs almost entirely to the delta of that river. Except in the vicinity of Nanking in the west, the land is everywhere level. In the south-west lies the T'ai Hu or 'great lake'; it is connected with various parts of the region under consideration by a series of canals, trenches, and ditches, which, taken as a whole, form an important system of navigation and irrigation. The climate is typical of Central China; the summers are long and hot, and the winters are, on the whole, mild. As a result it is frequently possible to obtain three crops per year from the soil.

Rice is the chief food plant of the region, and **silk** and **cotton** are the two most important industrial products. Throughout

the whole of this part of the province of Kiangsu there is hardly a village or hamlet round which the mulberry is not grown, and in which the silkworm is not reared. Much of the best silk in China is produced here, and the value of the output might easily be increased by improved methods of sericulture. Cotton is extensively grown on the right bank of the Yangtse, and on the island of Tsungming more than half the land is devoted to it. The lint produced is used in the mills of Shanghai and in Japan. In addition to rice, various other cereals and vegetables are cultivated as food-crops throughout this region.

From the Yangtse to the old Yellow River Bed

The second region of Kiangsu lies between the Yangtse and the former bed of the Huang Ho. It is also of alluvial formation and consists of material brought down by the Yangtse, the Huai Ho, and the Huang Ho. The climate is somewhat similar to that of the previous region, but towards the north the characteristics of the Huang Ho basin begin to make themselves felt. Much of the land is covered with water, and the dangers arising from flooding have always acted as a barrier to the economic development of this part of the country. Three subdivisions of the region may be recognized. To the west of the Grand Canal the land stands at a higher elevation than to the east, but much of it is under water, and the district is on the whole a poor one. **Rice** and **wheat** are the principal crops cultivated. To the east of the Canal the land is at a lower level, and in reality consists of polders which have been reclaimed from the sea. The whole of this district, as far east as the wall which protects the reclaimed land from the inroads of the ocean, is intensively cultivated, and is one of the most important rice-producing areas in the Empire. Considerable quantities are exported to other provinces, and, owing to the fertility of the soil, the amount which had to be sent to Pekin by way of tribute was large. **Cotton,** though not so important as south of the Yangtse, is grown to some extent, and various cereals are cultivated. The third division lies

between the previous one and the sea and along the northern banks of the Yangtse. The evaporation of salt from sea-water, which is a government monopoly, is the chief pursuit of the people, and is extensively carried on, the product being sent to various parts of the interior.

From the old Yellow River Bed to Shantung

The third natural region of Kiangsu is that which lies to the north of the former bed of the Huang Ho. The soil is alluvial, but in many places is covered with deposits of loess. Climate conditions differ from those which prevail farther south, and belong to the basin of the Huang Ho rather than to that of the Yangtse. Hence some of the most characteristic crops of the central and southern parts of Kiangsu disappear, cotton and the mulberry, for example, being no longer cultivated to any extent. The region is divided into two parts by the Grand Canal; in the west the land is higher than in the east, where much of the surface is covered by lakes. In the well-watered parts **rice** is grown, but there has probably been a considerable decrease in its cultivation since the Huang Ho retired to the north of Shantung. Elsewhere, **wheat** and other cereals of the north of China are the staple crops. The **opium poppy** was formerly an important product of the region, and, though its output has greatly declined, it is probably still cultivated to some extent in this somewhat secluded area. Along the coast **salt** is produced in the same way as farther south.

FORESTS

Taken as a whole, the province of Kiangsu is unforested. On the few hills too barren for cultivation there are woods of pine and dwarf oak, which are, however, never allowed to grow to any size. On the other hand, each village and hamlet is surrounded by its own grove of trees, consisting of bamboos (in the south), *gingko*, *ailanthus*, *sterculia*, and others. These provide the wood used for agricultural implements, but timber for building purposes has to be imported.

Some of the trees grown on the hillsides are used for firewood, but in places the people depend for fuel upon the beds of reeds which grow in the vicinity of lakes and rivers.

Manufactures

The manufacturing industry is of importance mainly in the region lying to the south of the Yangtse, where, as in some other parts of China, it is of a twofold character. The old Chinese industries are carried on, as they have been for centuries, either in small workshops or in the homes of the people; but alongside of these modern manufactures, organized on a western basis, have established themselves, sometimes under European and sometimes under Chinese control. The province of Kiangsu is, above all, noted for its **silk goods,** which are manufactured at various places, but more especially at Nanking and Soochow, where there are government factories. Nanking is particularly skilled in the manufacture of figured satins, and Soochow in that of flowered silks; and, notwithstanding the simplicity of the means of production, the output in both cases is reckoned the best in China. Each of the more important towns engaged in the silk industry has its favourite colour: at Nanking it is black, at Soochow blue, at Pukow Ku green, and at Chinkiang red. At Shanghai numerous modern filatures have been established, and much raw silk is reeled there before being exported to Europe. Similar filatures have also been erected at Nanking, Soochow, Wusih, and other towns, where labour appears to be cheaper than at Shanghai.

The **manufacture of cotton** is also of special importance in this southern region, where raw cotton is so extensively grown. In addition to the domestic industry native factories have for long had a considerable output. Nanking, for example, gave its name to a special fabric for which it was at one time famous; the industry of this town, however, has never quite recovered from the blow dealt it by the T'ai-p'ing rebellion. Modern cotton factories are found mainly at the town of Shanghai, but also at Nanking, Wusih, Taitsang, and Tsungming (in the island

of that name). In these towns a considerable amount of Chinese cotton is spun, but in the weaving sheds yarn from India and Japan is also largely used.

Other industries of this region are concentrated mainly at the ports, partly because raw materials are sent there to be prepared for export, partly because the industries have been introduced from abroad, and partly because the market is at hand. Shanghai has chemical works, breweries, engineering and shipbuilding yards, leather factories, paper-mills, saw-mills, printing establishments, and furniture shops. These, of course, vary in size and importance, but nowhere else in the Yangtse valley is there such a varied collection of modern industries. There are flour-mills at Wusih, and Nanking is engaged in milling rice and making matches.

In the central region of Kiangsu industrial activity is much more limited. The only manufacturing town of importance is Tungchow, on the north bank of the Yangtse, about 100 miles below Chinkiang. Here there are silk and cotton factories, flour-mills, oil-presses, and soap and candle works. In addition, the town is also engaged in a certain amount of iron smelting. Shiherhwei, on the Yangtse, is an important salt dépôt under government control, and Taichow Ku has flour-mills. The other towns of the region carry on local industries to some extent, but are in no way of special importance.

To the north of the old bed of the Huang Ho there is even less industrial activity. Süchowfu was formerly the centre of opium production in the province, and there are cotton-mills and oil-presses at Haichow. Otherwise there is nothing worthy of special notice.

Trade

Shanghai, which is the principal port not only of the province of Kiangsu but of the whole of China, owes its importance to a variety of considerations. It is situated at the lower end of the fertile Yangtse valley, and is connected with no small part of the canal system in the east of China. Its

facilities for a great port, and the absence of such facilities further to the north, contributed to make it the entrepôt not only for Central but for much of Northern China. In some respects its trade has been handicapped within recent years. The depth of the Huang-p'u, on which it stands, does not allow the larger ocean-going vessels to reach the town, and these are compelled to discharge at Woosung at the confluence of the Huang-p'u and the Yangtse. At the same time the development of the ports of Tsingtau and Dairen in the north have affected adversely some of the entrepôt trade of Shanghai. On the other hand the industrial growth of the town itself, and the economic development of the whole Yangtse basin, have more than compensated for the losses thus sustained.

Chinkiang is situated on the southern bank of the Yangtse, at the point at which that river is crossed by the Grand Canal. Hence it was for long a commercial centre of considerable importance. Within recent years, however, it has been losing trade. Goods from the south of Shantung no longer make their way along the Canal, but find their port at Tsingtau or go by rail to Nanking. Similarly the trade of Honan is tapped by the Peking–Hankow railway. The opening as a place of call of Tungchow, lower down the Yangtse and on the opposite bank, has also diverted a certain amount of trade from Chinkiang.

Nanking, which is situated on the right bank of the Yangtse opposite Pukow Ku, the terminus of the Tientsin–Pukow railway, has benefited considerably by the opening of that line. Exports from and imports to a wide area, including the interior of Anhwei, part of Kiangsu, and the south of Shantung, formerly made their way to the Grand Canal, along which traffic was slow and charges high. Since the opening of the railway much of the trade has passed through Nanking, where there are harbour facilities for ocean-going vessels.

CHAPTER V

SUPPLIES, TRANSPORT, AND ACCOMMODATION [1]

Supplies

Water.—Over the greater part of North Kiangsu there is no lack of water, and Chinese drink habitually from the canals and rivers. In the extreme NE., however, near the coast, the ground is so impregnated with salt that much of the water is undrinkable. At Sinpuchen, the port of Haichow, it has to be brought from a distance of several miles. The same difficulty in getting water would probably be experienced throughout the coast districts. Streams and rivers are not nearly so plentiful in the northern half of Northern Kiangsu as in the southern, and the former is therefore much more dependent on wells.

All drinking water should be boiled.

In South Kiangsu streams are abundant everywhere in the east, as also are ponds in the north-west, but water from either source would always require purification before being used for drinking. Wells are found to a small extent, but only in the upland country.

Fuel.—Villages in North Kiangsu are surrounded by trees and scattered clumps. This timber is too scarce and too valuable to be used as firewood by the inhabitants, but in case of necessity ample supplies could be obtained for the use of troops.

Reeds appear to be the common fuel of the country, and *kaoliang* stalks are also used in the north. Charcoal is to be had in cities and market towns.

In South Kiangsu *coal* is always obtainable in fairly large quantities at Shanghai, Chinkiang, and Nanking; at Soochow,

[1] *Authorities:* Mainly the Military Reports on the Province of Kiangsu.

Wusih, and other termini of steam-launch routes it is available in comparatively small quantities. Charcoal and kerosene oil in fair quantities are obtainable in all cities and market towns. The Asiatic Petroleum Company have large oil tanks at Ho-hua-t'ang near Chinkiang, at Soochow, and Shanghai. Elsewhere *wood* is the only fuel, and together with dung is universally used by the country people. There is no lack of it anywhere for a small force, nor for a large force if not long stationary ; although in the case of a continued stay by the latter in one locality the provision of fuel would probably become difficult.

Food.—The part of North Kiangsu south of the latitude of Tsingkiangpu, especially the Hsia-ho district, is a rich and populous delta, and the main food supplies, rice and wheat, are plentiful. In the north the country is less thickly populated and not so rich.

Some details about supplies obtainable in the various localities are given in the Gazetteer.

As regards the main articles of food :

Bread in the European form is not to be found anywhere in North Kiangsu. Over a great part of the province different kinds of Chinese bread, made of wheat or maize flour, can be obtained, especially in the north. This bread, though heavy, is eatable. In the Hsia-ho district it is not always to be procured, as rice is here more generally eaten. Limited quantities of bread made of wheaten flour could be procured in South Kiangsu in places where there are European communities.

Flour.—As wheat is extensively grown, flour is obtainable in fair quantities in all cities and market towns. There are flour-mills at Shanghai, Sinpuchen, Tsingkiangpu, Tungchow, Taichow Ku, Kaoyuchow, and Chinkiang. Together with millet flour wheaten flour is used to a small extent by the natives of South Kiangsu, and the bread so made, especially if baked under European supervision and leavened, forms a palatable and fairly efficient substitute for the real article.

Meat.—Almost the only meat eaten by the Chinese is pork. This can be procured in considerable quantities in all cities

and market towns; but the pigs are foul feeders, and it is doubtful whether their flesh is fit for food.

Buffaloes in the marshy parts, and cattle in the dry, are fairly plentiful. They are used by the Chinese for agricultural purposes, never for food. They would, however, be available as rations for troops. Sheep and goats are not plentiful enough to form an ordinary article of food.

Fish is a staple article of food in some parts. They abound in the creeks and rivers, and are obtainable in large quantities in all cities and market towns situated on waterways. They are apparently of the perch or carp type, and vary in size from 1 to 5 lb. Until sold they are kept alive in water. Salt fish is also easily obtainable.

In South Kiangsu beef and mutton are occasionally obtainable, but goats are found in some quantity and would often provide meat for small moving columns. In the hill and lake country west of Soochow mutton would be procurable in large quantities: the same remark applies to beef in the cattle-producing centres of the west, viz. Nanking, Chinkiang, Tanyang, and Liyanghsien.

Poultry, in the form of fowls, geese, and ducks, are fairly plentiful in South Kiangsu. Large flocks of ducks are seen feeding all over the delta country.

Rice is largely grown in the southern parts of North Kiangsu, and forms the staple food of the population of the Hsia-ho district, and of South Kiangsu.

Kaoliang, *millet*, and *maize* are grown in fair quantities in the northern parts.

Vegetables are obtainable nearly everywhere. They comprise cabbage, spinach, beans, peas, sweet potatoes, turnips, and carrots. Carrots are specially plentiful in the north, and form one of the principal articles of food of the poorer classes in winter.

Salt is produced in large quantities in the districts near the sea, and is obtainable everywhere.

Sugar is to be had in all cities and market towns. It is of the moist white variety.

Tea.—The tea of the country is plentiful everywhere. It is imported largely from other provinces, and, as commonly used by the people, is of poor quality.

Milk is not drunk by the Chinese, and is not obtainable in North Kiangsu. A little tinned milk might occasionally be bought in the larger towns. Fair quantities of fresh milk can be obtained in Shanghai. Elsewhere a very limited supply can be had from goats in South Kiangsu.

Oil for cooking is chiefly either ground nut or bean oil. One or the other is everywhere procurable.

Ghi is not obtainable anywhere, nor is any efficient substitute for it procurable locally.

Forage.—Animals are fed on *kaoliang* (durra or Guinea corn), maize, beans, and chopped straw. In the north, where they are much used, forage is to be had in considerable quantities, but this is not the case in the country south of the latitude of Tsingkiangpu.

In the event of a mixed force operating in South Kiangsu, the local supply of forage for animals would probably present greater difficulties than the supply of anything else required by the troops. This is partly because imported horses would have to accustom themselves to a strange diet, and partly because, owing to South Kiangsu not being a horse country, the feeding of draught and transport animals is not understood, and suitable foods are not easy to obtain.

The chief articles used by the people for this purpose are beans, unhusked rice, and coarse grass ; but not infrequently transport-donkeys are turned out into the country to find their own food as best they may.

As regards the number of troops that could be supported in the country in time of war, it may be said that in addition to some 70,000 rebels in Nanking, there were upwards of 20,000 troops—foreigners, levies, and rebels—living practically on the country for about three years during the T'ai-p'ing rebellion. These troops were almost entirely Chinese, and therefore rice-eaters ; but in view of the excellent water-communications and the probability of Shanghai being the

base, it is estimated that the largest European force likely to be called upon to operate in South Kiangsu could live there indefinitely without difficulty as regards its food supply.

Transport

Wheeled Transport.—Wheeled transport is not used in South Kiangsu, and the roads and bridges are quite unfitted for it. In North Kiangsu carts are used, but only in the part of the province north of the latitude of Tsingkiangpu. Some few exist in the part south of this ; but they are only used for agricultural purposes, and the same might be said of the majority of those in the first-named district. The carts are of three kinds :

(1) The Peking cart (*chiao-ch'ê*) is used on the main Peking road, from Tsingkiangpu northwards ; on the Peking-Nanking road, passing through Süchowfu ; to some extent on the Tsingkiangpu-Haichow road ; and probably elsewhere. These carts are drawn by two mules, and can travel 3½ miles an hour, even on long stages. They can carry from 900 to 1,000 lb., but owing to the small amount of storage space so great a weight of ordinary goods can rarely be accommodated. The price of a cart at Tsingkiangpu is about 60 dols., and its rate of hire about 1 dol. 75 cts. a day. A few of these carts can be hired at Tsingkiangpu and Süchowfu, but in most places they are so little used as to be unobtainable.

(2) The four-wheeled farm-cart of Anhwei is used to the NW. of Tsingkiangpu, and in the country to the south and west of it. It is a primitive vehicle with four solid wheels, drawn by three bullocks, with sometimes a donkey as well. It is used chiefly for agricultural purposes.

(3) The two-wheeled Shantung cart is used in the country east of that part of the Grand Canal which lies NW. of Tsingkiangpu. It is a superior vehicle to the four-wheeled cart, and is used both for agricultural and transport purposes. It is drawn by two bullocks or buffaloes, with sometimes a donkey in addition. A team frequently seen is a bullock in

the shafts and a buffalo and donkey side by side as leaders. These carts are said to be able to carry 2,500 lb. They are largely used for transport at Tsingkow, where they ply between the town and the port of Hsia-k'ou. At Tsingkow about 200 could be obtained; but they cannot move either along the road leading south to Haichow, or along that leading north to Jihchaohsien. That to Ichowfu, to the NW., is, however, practicable for them. Elsewhere these carts do not seem to be obtainable in any large quantity, but a few are always to be found in all the towns in this part of the province.

Pack Animals.—Pack mules and donkeys are used in the extreme north, but only to a limited extent, the latter frequently without pack-saddles. In South Kiangsu they should not be used in the delta. They are only used by the Chinese in the country west of Chinkiang and Tanyang, and then only to a limited extent. Even in this district, no pack-saddles suitable for army transport exist. In the delta country the roads are not made for use by pack transport. On the smaller roads some of the bridges would scarcely be equal to the weight, whilst in others the hand-rail would catch the load. The provision of fodder for the animals would also be difficult, since horses are not kept in this part of the country, and grazing-ground would usually be very difficult to find.

Wheelbarrows.—Wheelbarrows are the best means of land transport all over Kiangsu, though in certain districts, such as the Hsia-ho, they have been superseded by boats. They are the principal means of transport in the extreme north, and near the Yangtse they are very numerous. They are not, however, much used in the delta country, but there are few if any roads on which they could not move. Bridges would probably be found the chief difficulty. On some of the smaller roads an occasional bridge might have to be strengthened, whilst the 'camel-back' bridges over large creeks might cause some delay, as the wheelbarrow men would require assistance to negotiate the steep approaches.

The average load for a wheelbarrow, if required to march every day and to keep up with infantry, would be from 120 to 150 lb., but if barrow coolies are allowed to move at their own pace the load may be increased up to 350 lb. Strong winds and bad roads, especially bad paved roads such as that between Tanyang and Nanking, affect the speed of barrow transport very considerably.

Wheelbarrows are open to the objection that only men used to the work have the skill and the strength in particular muscles required to wheel them. A coolie not used to the work, however strong he might be, would scarcely get through one day's march. If the local Chinese barrow-men could not be obtained, it would be a risky experiment to import coolies from elsewhere to wheel the barrows. On the other hand, if regular barrow-men are available, wheelbarrows are the most satisfactory form of land transport.

In Shanghai there were, in 1914, 6,938 public wheelbarrows registered by the Municipal Council of the International Settlement. This does not include a considerable number registered by the French Municipality, and others outside the Foreign Settlements.

As a rough guide it is estimated that in those districts where barrows are the ordinary means of transport the numbers available would be approximately as follows :

In walled cities . . .	200 to 1,000
In market towns . . .	20 ,, 100
In villages	5 ,, 50

Coolies are very little used as a means of transport in North Kiangsu. On the other hand in South Kiangsu they are much used, the universal means of carrying loads being by bamboo poles on the shoulder. These poles are of two kinds, a split bamboo used by one man with half the load suspended at each end, and a solid bamboo used by two men with the load suspended between them at the centre. To maintain the marching pace of infantry the loads in each case may be 60 lb. and 120 lb. respectively.

These methods of carrying loads are much used when unloading goods from ships or boats, and when carrying things about the streets of towns. As wheelbarrows are restricted to a few districts, coolies with carrying sticks form indeed the sole means of transport in the greater part of South Kiangsu. But boat transport is so extensively used that there is not, as in some parts of China, a numerous class of coolies accustomed to carry loads for long distances.

River Transport.—River steamers run regularly on the Yangtse, stopping at Chinkiang, and sometimes at T'ien-shêng-chiang the port of Tungchow. See list of Yangtse River steamers in Appendix III, Table 1.

Launches and Boats in North Kiangsu.—Chinkiang is the chief centre for all launches with the exception of those on the Li Ho and its tributaries. The following companies at Chinkiang had launches plying mainly in North Kiangsu in February, 1908 :

(1) China Merchants' Steam Navigation Company or Chao Shang Chü had 8 launches, plying to and from Tsingkiangpu, Hsiao-ho-k'ou, and Soochow.

(2) Tai Sheng Chong (Japanese) had 9 launches plying to and from Tsingkiangpu, Yangchow, Siennümiao, and Soochow.

(3) Nisshin Kisen Kaisha (Japanese) had 7 launches plying to and from Tsingkiangpu, Yangchow, and Soochow.

(4) Ta Tong (Chinese) had 2 launches plying to and from Siennümiao and Yangchow.

(5) Li Chi (Chinese) had 1 launch plying to and from Hsiao-ho-k'ou.

(6) Lu Ping Chi (Chinese) had 1 launch plying to and from Siennümiao.

(7) Mei Tai (Chinese) had 1 launch plying to and from Liuho Ku.

Besides the above there were on the Li Ho and its tributaries 8 launches of the Ta Ta (Chinese) Company, 4 running between Siennümiao and Tungchow, 3 between Taichow Ku and Yencheng Ku, and 1 between Tungchow and Lüsze.

The average draught of the launches at Chinkiang is 4 ft., but some of the smaller ones draw no more than 2 ft. The launches on the Li Ho have an average of from 3 to 3½ ft.

The passenger accommodation of the launches is comparatively small, but they are used for towing passenger-boats : see below.

Chinkiang is the place where the largest number of boats could be obtained, the average number there being about a thousand. They are also very numerous all over the waterways, especially in the south part of the province : see Itineraries and Gazetteer. Boats differ considerably in size and draught according to the waterways on which they ply.

The accompanying list (p. 56), obtained from a Chinese boatman, was published in the Military Report on North Kiangsu, 1911. It gives an idea of the different kinds of boats in use at Chinkiang with Chinese names, which, however, will be found to vary in different localities.

Boats on the Grand Canal.—On the Grand Canal between Chinkiang and Tsingkiangpu most of the boats are modifications of the Yen-ch'uan or salt-boat, or of the Nan-wan-tzŭ or passenger-boat. The Yen-ch'uan is very massively built, of squat appearance, with one to three masts, and a low, flat-topped deck-house occupying scarcely one-third of the total length of deck.

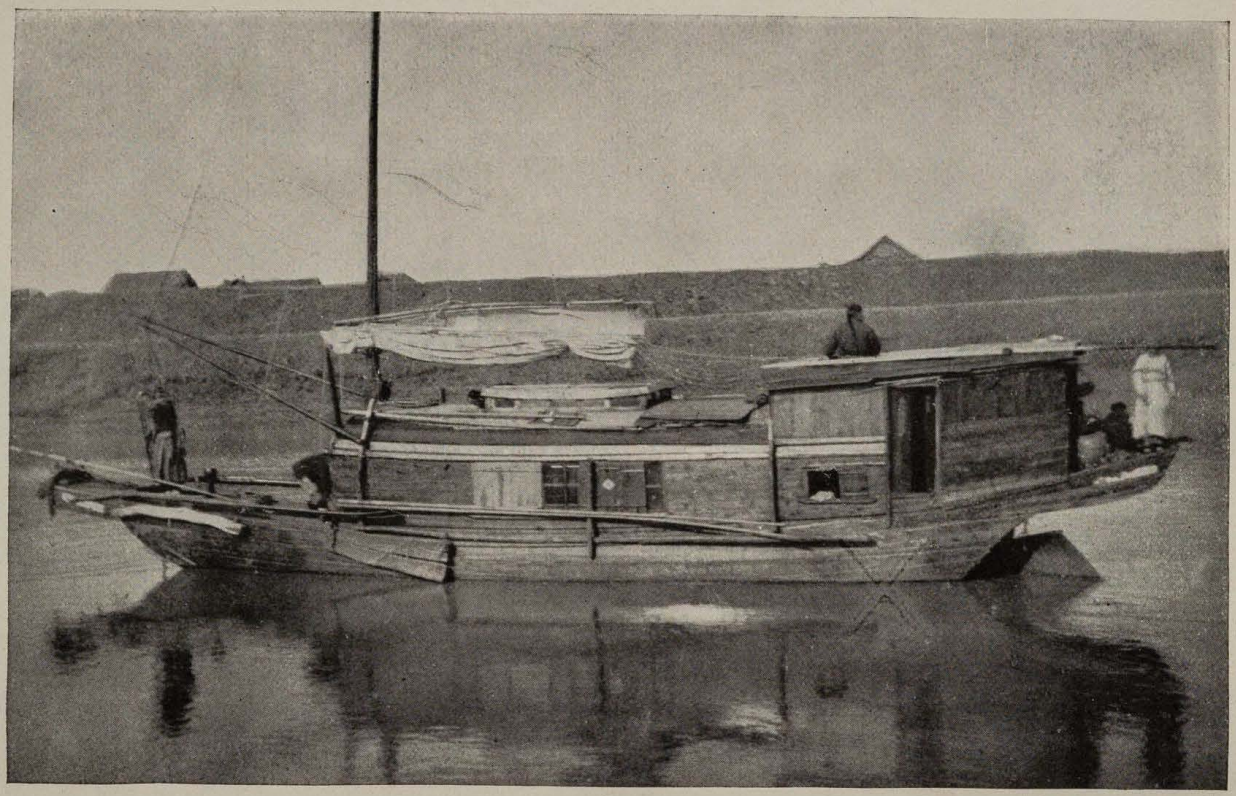
Its dimensions are :

Length from 30 to 85 ft., and width up to 23 ft. ; draught empty, from 1 to 5 ft. : laden, 3 to 9 ft.

The Nan-wan-tzŭ (see table) has a crew of four or five men ; it has a large deck-house, usually with two or more cabins.

Boats in the Hsia-ho District.—In the Hsia-ho district, salt and passenger-boats are those most frequently seen. The salt boats are one-masted, 65 and 70 ft. long by 10 ft. wide, with a small deck-house aft and a crew of three men. They carry 400 piculs, i. e. 28 tons, a picul of salt being 120 catties or 160 lb., thus differing from the ordinary picul which is 100 catties or 133 lb. With this load they draw 3½ to 5 ft.

Chinese name of boat.	*Length in feet.*	*Width in feet.*	*Draught empty in feet.*	*Draught loaded in feet.*	*Burden in piculs.*	*Where used.*	*Port of origin.*
Ya-p'i-ku	130	18	3	9	2,000 (120 tons)	Yangtse.	Shanghai.
Ta-chiang-ch'uan	135	20	2	9	2,000 to 3,000 (120 to 180 tons)	Yangtse.	Hupei.
Tiao-ch'uan	90	14	$2\frac{1}{2}$	8	1,200 (72 tons)	Yangtse.	Hupei.
Ya-shao-tzŭ	40 to 70	6 to 8	$\frac{1}{2}$ to 1	2 to $3\frac{1}{2}$	200 to 500 (12 to 30 tons)	Yangtse.	Hupei. Much used as passenger-boats.
Liang-hua-tzŭ	40 to 80	8 to 13	$\frac{3}{4}$ to 1	$2\frac{1}{2}$ to $3\frac{1}{2}$	300 to 1,300 (18 to 78 tons)	Grand Canal.	
Pien-liang-ch'uan	85	14	$\frac{2}{3}$	2	700 (42 tons)	Grand Canal and Yellow River.	
Nan-wan-tzŭ, also called Huang-k'ua-tzŭ or Shao-pai-hua-tzŭ	40 to 60	7 or 8	1	$3\frac{1}{2}$	650 (39 tons)	Grand Canal. (These are used chiefly as passenger-boats.)	
Shao-pai-tou-tzŭ	40	8	1	6	400 (24 tons)	Grand Canal.	
Mang-tzŭ	60 to 70	12 to 14	1	$3\frac{1}{2}$ to 4	600 to 800 (36 to 48 tons)	Huai Ho.	
Tui-ting-hua-tzŭ	80	12	$\frac{1}{2}$	2	450 (27 tons)	Huai Ho.	
Kuan-po-tzŭ	40 to 60	8 to 12	$\frac{2}{3}$ to 1	3 to 4	300 to 800 (18 to 48 tons)	Hsia Ho district.	
Yü-ying-tzŭ	40	6	$\frac{1}{2}$	2	200 to 300 (12 to 18 tons)	Hsia Ho district.	



A HOUSE-BOAT

The passenger-boats here average 35 to 40 ft. in length and 7 to 8 ft. in width, with a deck-house 6 ft. high by 16 ft. long. With passengers they draw not much more than 1 ft. ; with cargo 2½ ft.

Boats on the Yen Ho (No. 1).—On the Yen Ho (No. 1) boats may be divided into two classes—the Yen-ch'uan, or salt-boats, and the Hei-k'ua-tzŭ, or passenger-boats. The former vary in size, carrying from 200 (12 tons) to 1,000 (60 tons) piculs, and drawing when laden 2½ to 5 ft. The latter are about 35 ft. long by 10 ft. wide, and would give sleeping accommodation under cover to eight men besides a crew of three.

Steam-launches and Boats in South Kiangsu.—The steam-launches used on the inland waterways of South Kiangsu range from 40 ft. to 60 ft. in length, with a draught of 3½ ft. to 5 ft., and are capable of a speed of 11 miles an hour. A full tow of laden boats reduce their speed by about one-half, and the strongest tides may make a difference of 3 miles an hour either way.

The number of boats that can be towed is limited by the windings of the creeks ; ordinarily the maximum is 5 of the largest craft, giving a total tow-length of about 140 yds. The type of native boats used varies from a small *sampan* propelled by one man to the large passenger-boat towed by a launch. All boats have flat bottoms and square bows.

With the exception of the largest native passenger and houseboats, which are towed by launch only, the ordinary means of progression are towing by launch, sailing, tracking, poling, and *yuloing*.

A *yulo* is a species of long sweep or scull, with the last few feet of the handle set at an angle of about 150° with the rest, and worked over the side or stern of the boat. The boat is propelled by a motion similar to that of sculling a dinghy, with one oar over the stern. The *yulo* works on an iron pivot, the inboard end of the handle being held down by a rope fastened to the boat.

In ordinary circumstances the average speed when tracking or *yuloing* is about 2 miles an hour. Wind, tide, and current

affect both considerably ; progress against the current is often impossible with a moderate breeze, whilst before the wind the large boats of the barge type can attain, under sail, a speed of 9 miles an hour.

When conditions of wind and tide are adverse, tracking is usually resorted to. Along the Grand Canal and some other waterways there are regular towpaths, all side creeks being bridged at their mouths. But in many cases there is no towpath, and progress is made extremely slow by numerous unbridged side-creeks, entailing constant return of the trackers to the boat.

The following varieties of native boats are specially suited to military transport requirements ; the estimated accommodation is for an intermittent journey only, and includes light baggage :

(*a*) The *Kung-ssŭ-ch'uan(zên)* (passenger-boat) : approximately in two sizes, 40 ft. by 8 ft., and 80 ft. by 14 ft., both drawing about 2½ ft. of water laden, and accommodating 60 and 120 men respectively.

(*b*) The *Wu-hsi-k'ua* (house-boat) : ranging in size from 30 ft. by 7 ft. to 65 ft. by 15 ft., drawing from 1½ ft. to 2½ ft. laden, with a crew of 3 to 8, and accommodating 25 to 60 men.

(*c*) The *Hsi-tang* (open or partly decked barge or lighter) : ranging in size from 30 ft. by 6 ft. to 80 ft. by 15 ft., drawing from 1½ ft. to 4 ft. laden, with a crew of 3 to 8, and accommodating 20 to 80 men.

Type (*c*) is eminently suited for the transport of artillery, animals, and stores ; its cargo capacity is approximately half a ton per foot of length.

So far as launches and boats are concerned, arrangements for water transport inland from Shanghai would be facilitated owing to its being the terminus of a number of inland transport companies' lines.

Two of these companies were Japanese in 1907, the remainder Chinese. Their offices were situated in North Soochow Road, between the Honan and Shansi Road bridges over the Soochow creek.

Conditions permitting, transport arrangements could be made either through the consulate, through Messrs. Jardine, Matheson and Co., or through Messrs. Butterfield and Swire.

The need for quick action in regard to the requisition of transport should be noted :

(*a*) In the event of local hostility, in order to prevent its removal.

(*b*) In the event of an international expedition, in order to forestall its acquisition by other nations.

The number of creek-launches and of large native passenger-boats, type (*a*), which are available in Shanghai, between the hours of 7 a.m. and 5 p.m., is on an average 10 and 20 respectively. These are the property of the above-mentioned companies, and are moored opposite their offices in the Soochow creek ; they do not include a large number of foreign and native owned launches plying on the Huang-p'u.

On January 1, 1907, there were 325 [1] launches registered in Shanghai, of which about 250 were between 1 and 25 tons and would be useful for inland waterway navigation. The remainder range up to 900 tons and are used exclusively for Yangtse and Huang-p'u River work. Probably not more than 100 out of the above 250 would actually be available in Shanghai on any given day. Of the 250 launches under 25 tons about 80 would draw less than $3\frac{1}{2}$ ft. of water.

The following are the firms and transport companies owning 3 or more launches, and the number registered by each :

1.	Messrs. Jardine, Matheson and Co. . .	6
2.	Shanghai Dock and Engineering Co. . .	3
3.	China Merchants' Inland Steam-launch Co. .	17
4.	Tung Yu	14
5.	T'ai Hsing Ch'ang	11
6.	Chun Chi	9
7.	Pingsiang Coal Mining Co.	6
8.	Heng Ch'ang	6

[1] The figure in 1914 was 336.

9.	Heng Mou	5
10.	Shun Chi	5
11.	Hsiang An	4
12.	Li Yi	4
13.	Kung Hsing	4
14.	T'ai T'ou	4
15.	Hsiang Chi	3
16.	Hung T'ai	3
17.	I Ch'ang	3
18.	Ta Ta	3

Nos. 1 and 2 are British, Nos. 5 and 14 Japanese, and the remainder Chinese.

In addition to the foregoing a certain number of launches and passenger-boats would also be procurable at Chinkiang, Tanyang, Kiangyin, Changshu Ku, Changchow Ku, Wusih, Soochow, Taitsang, Hangchow, and Pinghu.

All these places are termini of regularly navigated routes; the head or branch offices of one or more steam-launch companies are situated in each. In 1905 there were 33 launches registered at Chinkiang and 9 at Soochow.

The numbers of boats of types (*b*) and (*c*) available in Shanghai and other cities are considerable, but they vary largely owing to the exigencies of traffic and trade. As a very rough guide it is estimated that from 10 to 100 of each kind would usually be available in the neighbourhood of all important cities situated on water highways. In Shanghai at least 70 of the type (*b*) and 100 of the type (*c*) would be obtainable.

In addition to native boats of type (*c*) there is a large number of foreign-owned lighters in Shanghai. The principal firm is Messrs. Hopkins, Dunn, and Co., owning about 130 steel and wooden lighters of all descriptions, and having offices at No. 7 Quai du Yang-king-pang in the French Concession.

Maritime Transport.—See lists of principal steamers plying to Shanghai and the coast ports in Appendix III, Table 2. All the sea-going coasting steamers are able to navigate the Huang-p'u to near Sungkiangfu and the Yangtse at least as

far as Nanking at all times of the year. Under ordinary circumstances the average number of British coasting and river steamers in Shanghai and Woosung harbours is about 15, of Chinese steamers about 10, and of steamers of other nationalities about 15.

Accommodation

Walled Cities.—As a rule a large proportion of the ground inside the walls is unbuilt on, being either under cultivation or used as graveyards. In some cities considerable areas of waste land exist, covered with ruins and débris, still showing evidences of occupation by the T'ai-p'ing rebels.

The streets are narrow, dark, and paved with flagstones and cobbles. Buildings are almost entirely of brick and stone with tiled roofs. Generally speaking, those in the denser quarters are filthily dirty, insanitary, and, in their normal state, quite unfitted for other than temporary occupation by European troops. In the less dense parts of the cities, however, are often to be found large detached or semi-detached private dwelling-houses, godowns, or temples, which, being airy, open, and more sanitary, would furnish reasonably good permanent accommodation.

The extra-mural suburbs of cities sometimes cover more ground than the walled enclosure itself. They lie chiefly along the water approaches to the main gates, and to a less extent round the foot of the wall on both sides of the moat. By reason of their greater accessibility from the outside, it is in these suburbs, very often, that the main business quarter of the city is situated. At such points the waterway, naturally constricted by overhanging houses, moored boats, and floating timber rafts, is always greatly congested by traffic.

Market Towns vary in size, the number of houses ranging from 51 up to 5,000 or more ; they differ from large villages only in the fact that they have a permanent market. The houses are generally in a ramshackle condition, very dirty, and would offer poor permanent accommodation for European troops. The best accommodation for troops would be afforded

by temples, of which there are usually one or more in each town. Towards the west of South Kiangsu market towns are more substantially constructed and offer somewhat better accommodation.

Practically all market towns have one or more inns. These have no heating arrangements, often consist of only one common room, and from the European point of view, are generally inferior to the inns of the northern provinces.

Villages range in size from those of a few houses up to those of several hundred. They are very numerous in the delta country, and are invariably situated on the banks of creeks, and are usually surrounded by trees. Villages are generally connected by footpaths which are usually passable for barrow or pedestrian traffic only. They seldom have inns, and casual accommodation is usually difficult to obtain.

Camping-grounds.—In the district north of the latitude of Tsingkiangpu there would be no difficulty in finding ample camping-grounds in winter ; but in a wet summer large tracts of country are sometimes under water from floods. In the more southern part, especially the Hsia-ho district, there is much wet country, and camping-grounds would probably be difficult to find in summer.

CHAPTER VI

PORTS, ROADS, AND INLAND WATERWAYS

Ports and Landing-places on the Coast—Roads—Bridges—Ferries—Inland Waterways.

Ports

The description of the northern end of the Kiangsu coast (given in the *China Sea Pilot* (1912), vol. v, ch. viii) shows that junks of about 8 ft. draught can reach the village of **Chü-mên-k'ou** at high tide. This village (latitude about 34°56′ N.) lies near the entrance of a river, 4½ miles NNW. of the island of Nai-nai-shan. At high water the entrance of the river is marked by breakers on each side. The village is frequented by fishing and trading junks. Near the sea the land is flat and of inferior quality, but half a mile inland it bears good crops of wheat and barley.

Five miles WSW. of Nai-nai-shan is the creek which leads to **Hsia-k'ou,** the port of Tsingkow, which can be entered by sea-going junks of 9 ft. draught at high water.

More importance attaches to the town of **Sinpuchen** (Hsin-p'u), the port of Haichow (see *Gazetteer*), which lies about 10 miles up the Haichow Ho and 17 miles ESE. from Hsia-k'ou. A shoal or bar extends about 5 miles north-eastward from the entrance of the Haichow Ho, and it can be crossed by junks of 8 ft. draught at high water. The port of Sinpuchen is frequented at all seasons by large numbers of native craft. There is no sheltered anchorage for a vessel of 15 ft. draught or over in this part of the coast (i.e. the bay northwestward of the Yün-t'ai Shan or Yu-chou promontory), but anchorage has been obtained by a steam-vessel in 3¾ fathoms water, soft mud bottom, with Nai-nai-shan bearing 204° true, distant 3 miles.

The coast from Yün-t'ai Shan to the entrance of the Yangtse, a distance of about 240 miles to Sha-wei-shan Island, is low and intersected by numerous streams. The whole of this coast is fronted by extensive flats and shoal banks, projecting in some places about 65 miles from the land, and rendering approach dangerous. No survey of the banks had been made up to 1912 (see the *China Sea Pilot*, vol. v, p. 406) ; but there are channels used by junks, which are able to reach **Fowning** by the Shê-yang Ho, and **Yencheng Ku** by the Yang-k'ou Ho (see *Gazetteer*, and Routes 25 and 26).

At the Old Yellow River mouth are the **Great Sands** (Ta-sha), which reach out for some 50 miles and are dangerous even for junk traffic. The most important landing-places in Kiangsu are in the Yangtse River and at its mouth. They are discussed in the article on the Yangtse.

From the mouth of the Yangtse to Chapu the coast-line is very flat, the tide being excluded by a sea-wall. Owing to the mud and sand-banks it is in most places impossible for ships to approach the beach. Although in good weather it would be possible to land almost anywhere, convenient landing-places are extremely rare.

Chapu was once the port of Hangchow, but now is little more than a fishing village. The anchorage is sheltered from ENE., through N., to SSW., but the tides rise and fall 25 ft., and the rate of the tidal stream is 5 knots at springs.

In Hangchow Bay the tidal bore renders navigation at the western end impossible for boats drawing over 3 ft.

British troops landed at Chapu in 1842, but it was then a flourishing seaport with a considerable garrison, and it was with a view to dealing a blow at the Manchu troops there that the British commander attacked the place. He did not attempt an advance inland, but, after defeating the enemy and capturing the town, soon afterwards re-embarked his force and went by sea to Woosung and Shanghai.

The distance from Chapu to Kashing is 23 miles, and that to Hangchow, via Kashing, is 81 miles.

Roads

In **South Kiangsu** there are no roads passable for wheeled artillery except in the immediate vicinity of Shanghai, Nanking, and Chinkiang. The top of the sea-wall which extends along the coast and along the south bank of the Yangtse is used as a road, and in places is wide enough to take wheeled traffic, but, except near Woosung, there is no access from it to any other carriage-road. A more detailed account of the sea-walls will be found in Routes 7 E and 8 B.

The average width of the roads is from 2 to 4 ft., and though the principal ones are passable for horses or wheelbarrows, in most parts of the province they are used merely as footpaths. Pack-animals are seldom encountered east of Tanyang, and throughout the province a mounted man is rarely seen. In the delta country it is only within a radius of 20 miles from Shanghai that wheelbarrows are employed, but farther west, in the Changchow Ku district, they are fairly common, and still farther west, between Chinkiang and Nanking, they form the ordinary means of transport. Every hamlet is connected by a road or path with the neighbouring villages or market towns, but the tracks as a rule follow a devious route, winding round the edges of fields, and making détours in order to find good points for crossing the creeks.

In the delta country, which includes by far the greater portion of South Kiangsu, only short-distance traffic makes use of the roads ; long journeys are more conveniently made by water, and it would be best to adhere to the custom of the country, and to use water transport wherever possible.

West of Changchow Ku waterways become rarer, and west of a line drawn from Chinkiang to Tanyang they almost cease to exist, with the result that roads form the chief means of communication between places other than those situated on the Yangtse.

For the most part the roads are of earth, hard in dry weather, but turning at once into mud when rain falls. They soon dry again when the rain ceases. Some of the main roads

are paved with flat stones, which make the track more passable, but are frequently slippery.

In the matter of roads **North Kiangsu** may be divided into two parts. In that south of Tsingkiangpu there are practically no cart-roads, but most of such roads as exist are passable for wheelbarrows. Farm-carts exist in parts of the Taichow district, but are not used as a means of through transport. North of Tsingkiangpu there are cart-roads; but even here carts are not used to any great extent, except for farming purposes, and wheelbarrows still remain the common form of transport.

The wheelbarrow roads are usually from 2 to 6 ft. wide. On some of them infantry could march in file, but single file would often be necessary. The main cart-roads in the north are from 15 to 20 ft. wide, but some of the smaller ones are 6 ft. or under.

The roads of North Kiangsu, as elsewhere in China, are unmetalled, so that after rain they become very heavy, and are sometimes impassable for carts or wheelbarrows for several days.

North Kiangsu is on the whole well supplied with roads, there being no large mountain ranges to form obstacles to communication. An exception, however, must be made in the case of the Hsia-ho district (roughly enclosed in the quadrilateral Hwaianfu, Fowning, Yangchow, Haian), a great part of which is so much cut up by waterways that all transport is done by boat, and wheelbarrow roads are very few.

The main road from Peking to Chinkiang runs from Ichowfu in Shantung to Tsingkiangpu. From here onwards the journey is usually continued by boat. Another main road—that from Peking to Nanking—crosses the NW. corner of the province from north to south, passing through Süchowfu. A road leads along the Fan-kung-ti, the great embankment constructed in the eleventh century as a protection against the sea. This extends from near the mouth of the Yangtse to the east of Tungchow northwards through Tungtaihsien and Yencheng Ku to Fowning. It is much used by wheelbarrows, but is not passable for carts (see Route 21 A).

Bridges

In the delta country, as well as in the Hsia-ho district, creeks and ditches have constantly to be crossed, and bridges are consequently very numerous. They fall under the following principal types :

(A) Wooden trestle bridge with plank roadway, passable for wheelbarrows ; generally of 3, 5, or 7 spans, but sometimes of as many as 10 or 12 spans. This is the commonest type of bridge. When constructed over a navigable waterway, it is often made with the centre span removable, to allow the passage of boats. Trestle bridges of bamboo are usually unstable and intended for foot-passengers only.

(B) Stone arch bridge (less common than wooden bridges except in the north-west of the province, and where stone can be obtained locally) ; one, three, five, or more semi-circular arches, with parapet ; crown, 1–3 ft. thick ; arch as a rule is strongly constructed with the stones arranged to break joint.

(C) Single-span wooden bridge, with stone abutments. Roadway of earth or tiles, on cross planks carried on round or square beams 6–15 inches in depth, provided with hand-rails.

(D) Single-span stone-slab bridge, with stone abutments. Roadway of one or more stone slabs which may be as much as 24 ft. long, 2 ft. wide, and 1 ft. thick.

(E) Stone-slab bridge of three or five spans. It may or may not have abutments, but has stone trestles, each with two legs and transom at top, measuring 1ft. by 1 ft.

(F) Bridges of boats are used for crossing the Grand Canal in North Kiangsu. The roadway is constructed of planks so arranged that those in the centre can be removed for the passage of boats. A modification of this type is used on the northern part of the Yen Ho (No. 1), where an earth embankment is built out into the canal from each side for a certain distance, the channel in the middle being spanned by one boat, which can be removed to permit of passage up or down.

On the road from Tsingkiangpu to Haichow, in winter

when the streams are not navigable, they are bridged by an earth embankment stretching right across. In summer, when navigation begins, these embankments are removed and a ferry replaces the bridge.

Nearly all bridges are constructed to take wheelbarrows, but many of the wooden bridges could hardly be considered safe for the passage of animals. Thus type D is sometimes too narrow to allow of the passage of horses which are not familiar with such bridges, and the same applies to type A, which is only passable when the bridge is in good order. In the north, on the main roads, the bridges are practicable for ordinary cart traffic.

All stone-arch bridges are exceedingly well constructed. The most common form is the single-arch bridge of type B, in which there are slight variations : it is popularly called the ' camel-back '. Nearly all bridges have steep approaches, which in the majority of cases take the form of stone steps.

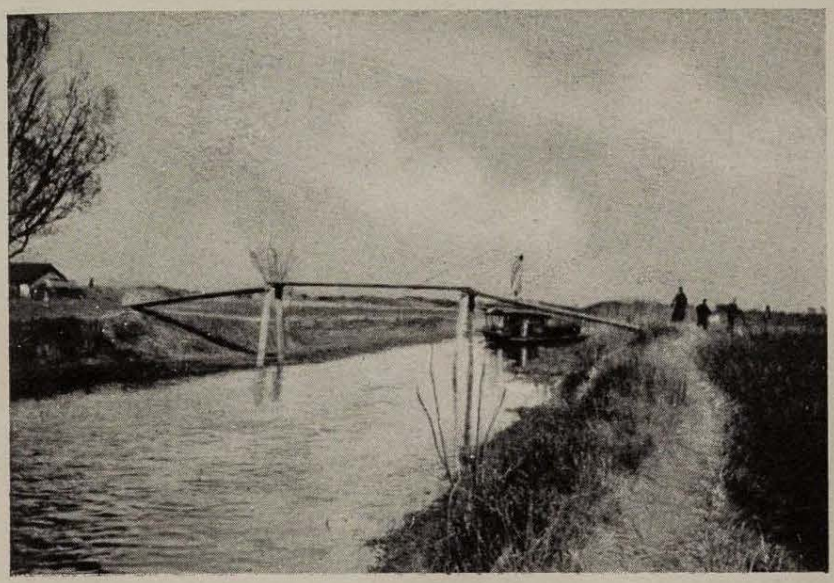
The width of the passage through a bridge may vary considerably according to the height of the water, owing either to the slope of the abutments, to projecting foundations, or to the completion below water of the circle of a bridge consisting, apparently, of a semicircular arch.

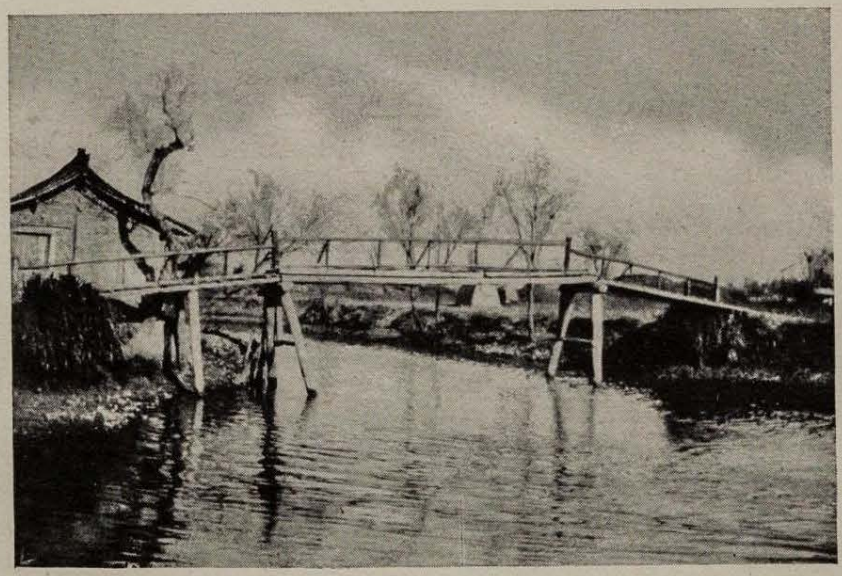
All important bridges, and many of the smaller ones, have their names cut into the stone at the centre of the span, but these names are not always those by which the bridges are known to the inhabitants. For railway bridges see Chapter IX.

Removal of Bridges

Stone abutments are in all cases very substantially built on solid stone foundations. They are faced with coursed masonry set in mortar, with a hearting of dry rubble, and their removal would take a long time. In bridges of type A the roadway and beams are easily removable.

In order to move the roadway and stone slabs of the bridges of types D and E, sheers and tackle would be required, and also a considerable number of men. It has been found that





SOUTH KIANGSU: WOODEN BRIDGES

about 100 men are required in order to up-end the largest stone slabs. Spars, blocks, and rope could be obtained from boats, whilst labour could be requisitioned from the nearest villages.

Considerable time and labour would be required for the removal of the tops of bridges belonging to type B, unless explosives were used, in which case there would be considerable risk of blocking the waterway.

Ferries

Ferries are numerous, especially on those larger waterways where, owing to the width of the channel, bridges are comparatively few. If a village does not possess a bridge there is almost invariably a ferry. The position of a ferry is often marked by a stone hut on the bank. The ferries vary widely in size and accommodation, from the large boats capable of taking 10 wheelbarrows or 40 to 50 men, to small boats and tub-shaped craft for foot-passengers only, and *sampans* propelled by a *yulo* (see p. 57), which will hold 6 to 10 people but cannot take horses.

Inland Waterways

The two most important waterways of Kiangsu, the Yangtse and the Grand Canal, are dealt with in separate chapters, while the other main routes are severally described in the itineraries. All the larger towns in South Kiangsu can be reached by water, but it is noteworthy that there is no navigable connexion between the inland waters and the sea, except by the Yangtse, since the coast is protected by a sea-wall through which the water from the creeks is passed by sluices.

Besides the launch routes there are numerous creeks navigable by boats of $2\frac{1}{2}$ to 3 ft. draught, and in addition to these there is a perfect network of lesser creeks on which small boats can ply. To such an extent is the delta cut up by creeks, that every villager can almost, if not quite, reach his door by boat.

In North Kiangsu, also, waterways are very largely used as a means of communication, especially in the country south of the latitude of Tsingkiangpu ; and in parts of the Hsia-ho district a regular network of waterways gives communication by boat in every direction.

It should be noted, however, that many waterways which by map appear to join each other are really separated by a dam, which prevents boats passing from one to the other. Sometimes an indirect route may give communication for boats between two waterways which are separated by a dam ; but these alternative routes are usually by small creeks : so that as a rule the main creek is used, and cargo is carried across the dam from one waterway to the other and put on to a fresh boat.

For transport purposes the waterways would doubtless be used extensively in military operations, especially in South Kiangsu, but it would be only along the larger channels, passable for ships or launches, that movements could be made with any rapidity.

There are certain main waterways which are navigable under all conditions ; but in very many cases the changing seasons cause difficulties in navigation. In winter the water becomes too shallow ; in summer and early autumn it rises, and although the increase in the depth of water would naturally be expected to permit the passage of larger vessels, the corresponding reduction in the headroom under some of the bridges neutralizes the advantage of greater depth.

As a rule the depth of the waterways is greatest from August to October, and least from January to March, but the rise and fall of the water cannot be foreseen, as the rainfall is fairly uniform throughout the year. During the summer so much water is taken from the creeks and canals to irrigate the fields, that a fall in the water-level is frequently caused. As the result of a heavy flood the embankments will sometimes give way ; the surrounding country is inundated and the water-level is suddenly lowered. For Chinese waterways are rarely dredged, and the practice is, as the depth increases



STONE ARCH BRIDGE AND STONE SLAB BRIDGE BEYOND



FERRY BOAT: SOUTH KIANGSU

with the deposit of silt, to raise the banks, and in consequence the whole waterway in time rises bodily above the surrounding country.

The depth of the waterway is sometimes affected by wind, which may blow water from the lakes into the creeks.

The following table of measurements taken at Soochow will give some idea of the variations in depth :

Table showing the Highest, Lowest, and Average Water-levels on the Soochow Gauge during the Six Years ending December 31, 1905.

Month.	*Highest.* (ft.).	*Lowest.* (ft.).	*Average.* (ft.).
January . . .	2·8	1·0	1·5
February . . .	2·8	0·3	1·3
March . . .	2·3	0·5	1·5
April	3·5	1·0	2·0
May	3·0	1·0	2·3
June	3·8	1·0	2·3
July	2·8	1·3	2·6
August . . .	4·8	1·3	2·8
September . . .	3·8	1·0	2·7
October . . .	3·5	1·8	2·5
November . . .	2·8	1·3	2·0
December . . .	2·5	0·8	1·7

In North Kiangsu ice is an obstacle in winter on some of the smaller creeks, especially where there is no current. The larger rivers are usually free from ice, and the waterways of South Kiangsu are never closed by ice.

Exclusive of the Yangtse and the Grand Canal, the chief inland waterways of Kiangsu are :

(1) By the Hung-tsê Lake to the Huai Ho, which gives communication with the province of Anhwei. (Route 35.)

(2) The Yen Ho (No. 1), from Sinpuchen to Tsingkiangpu. (Route 28 A.)

(3) The Li Ho from near Yangchow on the Grand Canal eastward through Taichow Ku and Jukao to Tungchow.

It has four smaller creeks connecting it with the Yangtse. (Routes 20, 22, and 23.)

(4) The Ta Ho from Taichow Ku northward through Hinghwa to Yencheng Ku. (Route 24 A.)

(5) The water route by the Yen Ho (No. 2) from Taichow Ku to Tungtaihsien. (Route 24 B.)

(6) The Ch'uan-ch'ang Ho from Haian through Tungtaihsien to Yencheng Ku. (Route 21 B.)

(7) By the Shangkang Ho and the Kang Ho from Yencheng Ku northward to Fowning. (Route 21 B.)

(8) The Yang-k'ou Ho from Yencheng Ku to the sea. (Route 25 D.)

(9) The Ta-shih-wan Ho from near Hwaianfu to Shangkang. (Route 25 B.)

(10) The Shê-yang Ho from near Hwaianfu through Fowning to the sea. (Routes 26 B and C.)

(11) From Tungchow eastward to Lüsze. (Route 20 C.)

(12) Huang-p'u River. For navigation from the mouth to Shanghai see *China Sea Directory*.

(13) Creeks branching from the Huang-p'u River:

(*a*) Soochow Creek or Woosung River. (Route 5 A.)

(*b*) On the Shanghai to Kashing route. (Route 3.)

(*c*) On the Shanghai to Pingwang route. (Route 4.)

(*d*) On the Shanghai to Sungkiangfu route. (Route 6.)

(14) From Shanghai to Taitsang. (Route 7.)

(15) From Shanghai to Changshu Ku. (Route 9.)

(16) Old central channel of the Yangtse, now a creek connecting Wuhu with the Great Lake (T'ai Hu). (Route 16.)

Numerous lakes, mentioned in the descriptions of the routes, assist largely in the inland water communication. The most important is the T'ai Hu, which has an area, at normal times, of over 1,000 square miles. It is very shallow, and is navigable for small launches only along certain known routes. Sudden storms are another source of difficulty; and without the assistance of a pilot having local knowledge the navigation of all the lakes is dangerous (see Route 1 C). For the Hung-tsê Lake see Route 35.

CHAPTER VII

THE YANGTSE RIVER IN KIANGSU

From the Sea to Tungchow—Tungchow to Kiangyin—Kiangyin to Chinkiang—Chinkiang to Nanking—Nanking to Wuhu.

THE Yangtse flows from west to east through the province for 260 miles, dividing it into North and South Kiangsu. In the upper part of its course through Kiangsu its width averages from ¾ to 2 miles. Below Tungchow, at what is known as the Lang-shan Crossing, it widens out to 10 miles, and maintains this width to a point beyond where the Huang-p'u joins it near Shanghai, becoming still wider near its mouth. The whole of this part of the Yangtse is navigable for large sea-going ships. Vessels of 29 ft. draught can usually reach Nanking at any time of year unless the water is exceptionally low, and those of 25 ft. always. Steamers call every day at Chinkiang and Nanking on their way up and down the river. Chinkiang is the chief centre for all launches, with the exception of those on the Li Ho and its tributaries. (The Li Ho starts from a point near Yangchow on the Grand Canal and goes eastward through Taichow Ku and Jukao to Tungchow; there are four smaller creeks connecting it with the Yangtse.)

At Wuhu, 281 miles from the sea, the extreme range of the tide is 2 ft. at springs and 1 ft. at neaps. During the high river period in summer the rise and fall is even less. At Woosung, 32 miles from the sea, the rise and fall at springs is 13½ ft., at neaps 9 ft. The river is low during the winter season, December to March, and high from July to September, the average difference between its high and low level being, at Woosung, 3 ft.; at Chinkiang, 12 ft.; at Nanking, 18 ft.; at Wuhu, 19 ft. The annual rise of the Yangtse causes inundations, the extent of which varies greatly in different years.

From the Sea to Tungchow

For 80 miles above Woosung—that is, nearly as far as Kiangyin—the river has a breadth of from 2 to 10 miles, but the navigable channel is much narrower owing to extensive sand- or mud-banks, which are subject to constant change. From the Yangtse Cape to the mouth of the **Huang-p'u** or Woosung River, the coast-line is low and flat, and an immense mud-bank extending from the shore makes landing impracticable. A sea-wall runs along the coast from a point halfway between Chapu and Kinshan, as far as the village of Lu-yüan-chên, 7 miles beyond Fushan. The wall is double from a point $1\frac{3}{4}$ miles south of Tatwan and about 9 miles WNW. of the Yangtse Cape. Yet a third wall, east of the other two, and 11 miles in length, has been constructed from a point 3 miles east of Chwansha to the junction of all three walls, a little beyond the Kin-toan Beacon, where the river bank is only half a mile distant. At **Woosung,** which is protected by forts, all ocean-going steamers cast anchor. Shanghai, 12 miles up the Huang-p'u, may be reached by train or steam-launch (see Route 8). Abreast of this point, the large island of **Tsungming** divides the Yangtse into a north and south branch. The navigable channel is on the south side of the island and over towards the right bank of the river. Tsungming is 42 miles long in a WNW. direction by 6 to 9 miles broad, and its superficial area is about 300 square miles. The population is very dense, being estimated by Hâvret at over a million. The island is alluvial in origin, and so low-lying as to be beneath the level of the highest floods, so that dykes have had to be constructed for the protection of the coasts. A sea-wall, 17 miles long, 10 ft. high, and 40 ft. thick at its base, starts near the south-eastern extremity of the island, runs inland for about 5 miles, and then turns towards the north coast, which it follows at a distance varying from a mile and a quarter to a few hundred yards in the last mile, where it passes close to the village of Fu-min-chên. The chief villages of the island lie in the area sheltered by this sea-wall: Mi-hang-chên in

the interior, Paochen less than a mile from the Yangtse on the south, and the long straggling market-town of Sinkaiho 9 miles from the city of Tsungming. The walls of this district city are 20 ft. high, 20 ft. thick, surrounded by a moat 30 yards wide, and pierced by 7 gates, including 2 water-gates. Naval wireless station here. In the NW. half of the island the only village of importance is Miaochen, at the intersection of several roads and creeks. The numerous canals which have been cut through the island in every direction are mostly silted up, and wheelbarrows form the principal means of transport. The inhabitants are extremely poor, and live in huts built of reeds and thatched with straw. Cotton-spinning is practically the only industry.

Above the mouth of the Huang-p'u several good landing-places can be found on the south bank. Half a mile north of the Woosung Lighthouse is Nan-shih-t'ang Fort, and $1\frac{3}{4}$ miles farther up is Paoshan Point, just inside which is the walled city of Paoshan, marked by a pagoda. North-westward of this is a shallow bay, with a sand-bank off which shoal water extends upwards of a mile from the river bank. Three and a half miles above Paoshan Point is Shih-tzŭ-lin Fort, and 5 miles farther, at the village of Shih-tung-k'ou, is a favourable place to effect a landing. About 16 miles above Paoshan Point, just opposite the town of Tsungming, is the mouth of the Liu Ho, a creek leading past Liu-ho-hsin-chên (1 mile) and **Liuho Ku** ($3\frac{1}{2}$ miles) to the city of Taitsang (22 miles; see Route 7 E). From Liu Creek to Plover Point, a distance of 25 miles, the river is encumbered with shoals. Near Plover Point is a village, and there is good anchorage just to the west of it. Farther on are the villages of P'êng-chia-ch'iao and Wang-shu-chên ($1\frac{1}{2}$ miles inland), marked by conspicuous trees, and, $12\frac{1}{2}$ miles above Plover Point, the small town of **Fushan,** a collection of white houses with a ruined pagoda and a small fort on a hill 135 ft. high. Here is a creek, with a narrow and shallow mouth, leading to Changshu Ku, $10\frac{1}{2}$ miles inland (see Route 10). Both town and creek are commanded by the two hills Ma-chia Shan and Tien Shan,

about a mile to the west. The river channel now makes a sharp bend towards Vine Point on the left bank. This is known as the Lang-shan Crossing.

The channel north of Tsungming Island, said to have a depth of only 4 to 5 ft., is very little used except by native craft. Owing to shifting sand-banks and the alluvial deposit of the river, the configuration of the coast has undergone enormous changes even in the last 50 years. The ports of Lintienchen on the north bank, and of **Haimenting** 14 miles farther west, 20 miles below Tungchow, both lie on small tributaries of the Yangtse, and are visited daily by small Chinese steamers from Shanghai. There are a very large number of creeks opposite Tsungming Island, the last one of any importance being Niu Creek, where there is a beacon. For 10 miles after this the left bank of the Yangtse is low and ill-defined ; the plain is then broken by hills 370 ft. high, on the NW. summit of which Lang Shan pagoda shows out conspicuously.

From Vine Point, which lies WSW. of Lang Shan, to Kiushan Point the left bank is low, but the first portion is steep-to. The other side of the river is a series of mud-flats. North Tree Beacon stands $5\frac{3}{4}$ miles from Lang Shan pagoda, and a little to the south, close to the river bank, there is a convenient anchorage. $2\frac{1}{4}$ miles farther on we come to Lao-lu-ching-chiang, which used to serve as port to **Tungchow.** The present port, **T'ien-shêng-chiang,** lies about $2\frac{1}{2}$ miles above it. Here is a Custom-house with a clock tower. The river bank is faced with a stone bund, and off it are moored two hulks. River steamers call here to embark or discharge passengers bound to or from Tungchow, about 8 miles up the creek, which, turning nearly at right angles when 3 miles from the town, opens into the Yangtse just west of the Custom-house (see Route 20). Tungchow is in communication by water, through Jukao and Taichow Ku, with the Grand Canal at Liu-cha, 8 miles north of Yangchow, and launches run daily to Siennümiao, 10 miles short of Liu-cha (Route 22). There is also water communication northward with Tungtaihsien, Yencheng Ku, and Fowning (Routes 21, 24), and eastward with Lüsze (Route 20 C).

Tungchow to Kiangyin

Mud-banks stretch from here to Kiushan Point. Rounding Cooper Bank we reach **Changhwangkiang,** about 20 miles above Tungchow on the left bank, at the mouth of the Mo-t'ou Ho, by which there is communication by boat with Jukao on the Li Ho, 25 miles distant. Steamers do not stop at this place, but it is much frequented by boats in the high-water season. Eight miles farther up is the Tung-lo-tu Beacon, near which there are some hills 250–350 ft. high. South of Kiushan and Cooper Banks there is a direct channel, about 15 miles long and ¾ mile broad, which is available for most of the steam traffic on the Yangtse. Another 8 miles brings us to the Kiangyin Narrows, where the river narrows to ¾ mile, with a depth of 20 fathoms. The whole of the left bank from Kiushan Point onwards is well cultivated, with numerous hamlets inshore, and an embankment along the high river level. On the opposite side numerous creeks lead to Shih-ta-chiang, Shih-p'ai-chên, Shuang-p'ai-ch'iao, Huang-shan-chiang, &c., all between 1 and 3 miles inshore.

Kiangyin, a walled town quadrilateral in form, is situated about a mile from the right bank of the Yangtse, on a creek which is usually crowded with junks. The town is surrounded by a moat, which is joined to waterways leading to the Grand Canal (see Routes 14 and 15) and eastward to the Yangtse, 7 miles above Fushan. Parts of the surrounding country, except to the west, are moderately elevated, and there are numerous forts on the hill-tops. On the east hill is a signal station connected by a telegraph wire with Peking and Shanghai, and a submarine cable crosses the river hereabouts. Near it is a pier extending out into the river. On the left bank, which is lower, there are also some forts, so that the passage through the narrows is well guarded. Two creeks from this bank lead to **Tsingkianghsien,** 4 miles inland, and to Yin-sha, 1½ miles inland. There is a conspicuous look-out tower at the entrance to the Yin-sha creek. Kiangyin is a regular place of call for river steamers. Anchorages can be

found off the left bank of the river above the city, or for small vessels on the right bank, about ½ mile westward of the creek leading to Kiangyin.

Kiangyin to Chinkiang

Between Kiangyin and a creek 11 miles farther up the river, which connects with the Grand Canal at Pên-hu, the right bank of the Yangtse is bordered by a mud-flat ¾ mile broad, the outer edge of which is very steep-to. On the left bank, from the creek leading to Yin-sha to Bate Point, a distance of 13½ miles, the land is low and flat, with many small houses hidden in verdure and beautifully cultivated fields. Inshore is an immense green plain. At Bate Point the river turns north and widens to 5 miles, but the greater part of this area is occupied by a sand-bank on which are some islands, and the only navigable route is the Hermes channel close to the left bank. Two miles above Bate Point is a creek, near which is the village of T'u-ch'iao-chiang. Four miles farther, is the village of **T'ien-hsing-ch'iao,** with good anchorage for large vessels, and four miles farther still, a creek leading to the district city of **Taihing,** 3 miles inshore. River steamers stop here. The shore along the left bank, on the eastern side of Hermes channel, is wooded and populous, and extensively cultivated. Above Collinson Point the right bank of the river forms a deep bight. At 7½ miles above the point high rocky bluffs rise precipitously from the edge of the river in front of irregular pointed hills, the Ta-wan Shan, Ku Shan, Ch'i-fêng Shan, &c. Two of the summits are crowned by pagodas. A little farther on is the entrance to the Sha-yao Ho, a narrow channel, used by junks, which rejoins the main stream of the Yangtse north of Chu Shan.

The navigable channel passes to the west of Pottinger and Kiying islands (now joined into one), and there is a good anchorage off the right bank abreast of the latter. Half a mile above Kiying island is the mouth of the Kuo Ho, which runs into the Yangtse from Taichow Ku. Here is the village of

Lung-wo-k'ou and, 2 miles up the river, the port of **Kowan,** which is much used in the high-water season, as at that time of year boats of 4 ft. or 5 ft. draught can ascend to Taichow Ku, 19 miles distant (see Route 23). In winter there is in places not more than 1½ ft. of water in the Kuo Ho. Steamers do not stop here, but if required there would probably be no difficulty in anchoring and landing from boats. A much used wheelbarrow road, which is shorter than the river route, also connects Kowan with Taichow Ku. Taichow Ku is in communication by launch with Tungchow on the east and with Siennümiao on the west. Northwards, launches run through Tungtaihsien to Yencheng Ku.

Off the right bank, 2 miles below Parker Point, the north point of the large island formed by the Sha-yao Ho, will be found a good anchorage for large vessels. Westward of Parker Point is Rose Island, about 1 mile in length, and separated from the right bank by a narrow channel used by junks in summer. Opposite Rose Island on the other side of the river, Siennümiao (Sin-ni-mu) Creek runs inland in a NNW. direction; at its mouth is the village of **Sankiangying** (a harbour for sailing boats) and a fort. From Sankiangying there is water communication not only with Siennümiao but also with the village of Pai-t'a-ho, 13 miles distant, on the Li Ho. Three and a half miles above Parker Point is the upper entrance to the Sha-yao Ho, bordered on the south by densely populated country extending to the slopes of Chu Shan (800 ft.), which is surmounted by a conspicuous pagoda 2 miles inshore, and Wu-chi Shan (500 ft.), with a row of batteries fronting the river. There are also forts on the opposite bank here. Anchorages for gunboats may be found 1 mile below Siennümiao Creek; in the channel south of Rose Island; and in the Sha-yao Ho under the Chu Shan forts.

About 4 miles above the Sha-yao Ho is the village of Takiang, and 2½ miles farther on the village of Hai-ch'i. On the left bank, nearly opposite Takiang, a Custom-house stands at the mouth of a creek. Two miles above Hai-ch'i, and about a mile up a creek connecting with the Grand Canal,

is the village of Kienpi. There is some fairly elevated land in this neighbourhood. Three miles more bring us to the town of Tantu, situated on the Grand Canal, which, after running northward from Tanyang, turns westward at this point to Chinkiang. A creek half a mile long provides an outlet to the Yangtse. North of Tantu there are large flat islands in the river. The channel used by vessels of heavy draught runs north between the islands of Ta-sha and Chang-sang-chou, then turns west at Chin-chou Point. Smaller vessels generally use the Tantu channel. Just at the point where the north and south channels merge into one, **Chiao Shan,** or Silver Island, rises to a height of 233 ft. above high-river level. This island, the first above the mouth of the Yangtse which is not altogether alluvial, is well fortified and has a low pagoda on its summit. The land to the north of Chiao Shan consists of a low and richly cultivated plain; south of it, on the right bank, are the fortified hills, 159 ft. high, of Hsiang Shan Bluff. Between the island and the right bank is a difficult pass, encumbered with dangerous isolated rocks, so that the navigable channel is only about 130 yds. wide.

Two miles farther along the right bank is Pei-ku Shan or Consular Bluff, a little way north of **Chinkiang** city wall, and about 182 miles from the sea. Here the Grand Canal enters the Yangtse, after passing along the south and west sides of the city, with a small cutting through Chinkiang itself. On the left bank the village of Ch'i-hao-k'ou stands nearly opposite, and 3 miles higher up the Grand Canal continues its course northwards, passing to the west of the triangular island and walled town of **Kwachow.** The canal embankments on each side from Kwachow to Yangchow, eleven miles distant, are in fairly good condition; but although there has been some dredging done on the bed of the canal, there are still shallow patches at Yangchow, so that for a distance of 3 miles only 2 ft. of water (4 to 5 ft. in the high-river season) can be counted upon. The wall surrounding Chinkiang (see *Gazetteer*) is about 4 miles in circuit, and its north face

is about 600 yds. from the river bank. The European Concession extends westwards along the river front to the British Consulate on the slope of Yün-t'ai Shan, and Garlic Hill at the end of the bund, on which a white beacon has been erected. The land in the vicinity is low and flat, with several hills emerging from the plain. Chin Shan or Golden Island is now a precipitous rock on the right bank, west of the European Concession, built over with temples and a pagoda 213 ft. high. Though still an island 60 years ago, it is now 700 yds. inside the low river edge. This shows how rapidly the right bank is silting up at this point. At the same time the north bank is being constantly eroded. Depths in the harbour range from 5 to 26 fathoms. The landing-places are bad except at high river. A number of hulks are moored along the river front and connected to the shore by piers or jetties. At low river, the ends of the piers are extended somewhat. The best anchorage for gunboats in summer is above the hulks ; in winter, vessels moor 2 cables or more away from them. Steamers call daily, bound either up or down the river, and there is railway communication with Shanghai and Nanking (see Chap. IX, railway No. I). A submarine cable crosses the river in a north and south direction close westward of Consular Bluff.

Chinkiang to Nanking

Two miles above Chinkiang is the island of Chin-chun-chou, 2 miles in length by 1 mile in breadth, and separated from the right bank by a narrow channel known as the Nien-yu-tao Creek. Its northern extremity, nearly opposite Kwachow, is named Saltoun Point. The main channel is to the north of this island and to the south of the large island Pi-hsin-chou (Deer Island), 6 miles in length. A stream flowing into the Yangtse from Kaotze, about 8 miles from Chinkiang by rail, is navigable at high tide up to a stone bridge $1\frac{1}{2}$ miles south of the town. For a stretch of about 25 miles the country between the right bank and the Chinkiang–Nanking railway

is mostly low-lying paddy swamp, impassable except by foot-paths. The main road lies mainly on the other side of the railway, along the foot of hills covered with grass or dense prickly bushes (see Route 17). On the left bank, nearly opposite Bethune Point at the western end of Pi-hsin-chou, is the small but busy town of Shiherhwei, flanked by a fort on the east and a camp and salt station on the west. At Ssŭ-yüan-kou, 3 miles above Bethune Point, there is a Custom-house on the left bank, at the mouth of a creek leading to the market town of **Icheng,** 1½ miles inland (see Route 36). Three-quarters of a mile above the Custom-house is another creek, named Chu-hui-chiang, and 2 miles above is a second Custom-house (Lung-wang-miao) at the mouth of a creek, on the east side of which is the village of Shan-man-chou. Anchorage for small vessels exists abreast of Lung-wang-miao, just below Morrison Point on the right bank, where there is a small but conspicuous tree. Navigating south of the long rocky ledge called the Icheng Rocks we pass a third Custom-house on a creek at **Tahokow,** 4 miles farther up the left bank. Two miles NW. of Tahokow are two peaks about 400 ft. high. Two miles higher up there is anchorage for small vessels off the north shore.

Nine miles above Morrison Point and 2 miles from the right bank of the Yangtse is Lone-tree Hill (the tree which gave it this name is no longer there); northward of it is Hsi-hsia Shan, 891 ft. high. A creek from Chinkiang here turns into the Yangtse, after running more or less parallel to it for some 30 miles. The country from here to Nanking is more broken with hills: Cornwallis Bluff rises over the river to a height of 250 ft., above it are the Yen-tse-ke Hills, on which there are newly constructed forts, and the high hills of Wu-lung Shan form the point which has to be rounded by vessels desiring to reach Nanking by the Tsao-hsia Creek. Nearly opposite Cornwallis Bluff, on the left bank, is a mud fort with a beacon. These are really on the south point of a low island formed by the two branches of the Wang-chia Ho, a stream which passes by Ning-an Shan, a hill with a pagoda, 7½ miles inshore;

westward of this hill is the district city of **Luho** (see Route 36). The eastern outlet of the Wang-chia Ho is 3 miles east of Mud Fort, and the western 2 miles north-west of it.

The main stream of the Yangtse now makes a large curve round Tsao-hsia Island, which is separated from the right bank by a narrow creek named the Tsao-hsia Creek or the Nanking Cut-off. The interior of the island is often flooded; the northern portion is covered with reeds and bounded by shoals. Its western extremity is Pagoda Point, and from here to its southern extremity, Theodolite Point, the shore is steep-to. On the mainland, 2½ miles up the creek, is the village of Kwanyinmen, and farther on there is a line of batteries along the Mo-fu Shan and the Lao-hu Shan. Immediately above Theodolite Point is the city of **Nanking,** 228 miles from the sea by water, though but 170 as the crow flies (see *Gazetteer*). Ping-shan pagoda, on the western side of the river, opposite Tsao-hsia Island, is situated on the top of a hill backed by irregular ranges, on one of which, named Ting Shan, there is a fort.

Between the west wall of Nanking and the river are a series of moats and fish-ponds, and here also is the port of Nanking, called **Hsia-kuan,** situated on both sides of the Chin-huai Ho, a small river navigable for junks, which flows along or close to the south and west sides of the city, with two or three outlets to the Yangtse, forming one or two low flat islands between Nanking and that river. Along the river bank, as at Chin-kiang, hulks are moored and connected to the shore by piers or bridges. From abreast the southernmost hulk a stone bund has been built for a distance of 700 ft. to the southward.

On the left bank of the Yangtse, at the entrance to a creek, nearly opposite to, but a little below, the north end of Nanking, is the town of **Pukow Ku,** which is rapidly growing in importance as the terminus of the railway line from Tientsin. Four hulks are moored off the river bank here, the northernmost of which is for the use of the ferry steamers from Nanking. There is also a wooden pile wharf about 500 ft. long. Steam-launches run hourly between Nanking and Pukow Ku. The

normal rate of the stream here is 2–2½ knots. Tidal undulation is slight. The usual anchorage off Nanking is near the right bank, south of Theodolite Point. There is also anchorage off Pukow Ku, on the left bank or to the southward. Chinese war-vessels anchor near the mouth of the Chin-huai Ho, off Hsia-kuan; foreign war-vessels take up berths above the Custom-house about 3 cables off the nearest hulk, but sometimes they prefer to anchor in the shallower water near the left bank of the river. Small vessels find good anchorage off the left bank above Pukow Ku or near the north end of Me-tse-chou, and also in the mouth of the Nanking Cut-off. The landing-places at Nanking are all bad and unsuited for steamboats. A nasty choppy sea is caused by northerly winds. For railway to Shanghai via Chinkiang and Soochow see Chap. IX, railway No. I. All steam vessels proceeding up or down the Yangtse call at Nanking.

Nanking to Wuhu

The section of the river, 12 miles in length, from Hsia-kuan to Hsia-san Shan, a bluff 350 ft. high on the right bank, is known as Nanking Reach. Abreast of the city, but 2 to 4 miles west of its west wall, is the island Me-tse-chou (or Yung-ting-chou), 7 miles in length and 2 in breadth, separated from the right bank by a narrow channel which is used by junks in order to escape the strong stream setting down the main channel. Immediately west of Me-tse-chou, and separated from it by a very narrow creek, is a second island 4 miles in length. Between Wylie Point (the south end of Me-tse-chou) and Hsia-san Shan is the village of **Tashengkwan,** at the mouth of a creek. The whole of the land on the east side of Nanking Reach is liable to be inundated in summer up to the hilly ridge about 3 miles inland. On the west shore of Nanking Reach is a creek running inland in a NNW. direction to **Kiangpu,** an ancient walled town now partly in ruins (see Route 39), at the back of which, 5 miles from the river bank, there is a chain of hills. At the mouth of the creek, on the north side, is the village of Chiang-wei. Four miles farther

on is the entrance to another creek, with a small village. All the land is covered with reeds up to the foot of the hills.

The next section of the river, about 15 miles long, is called Elgin Reach. On the east side, just above Hsia-san Shan, there is a small island, 50 ft. high, and behind Rocky Point, 4½ miles higher up, a hill 70 ft. high. The foreshore between Hsia-san Shan and Rocky Point is rocky and foul. Pheasant Island, which is low and covered with reeds, is separated from the right bank by a narrow waterway which can be used by junks and small steamers. The boundary between Kiangsu and Anhwei passes through this island. The upper part of Elgin Reach on the east side is low and partially flooded at high water, but about a mile inland there is a ridge of hills, 350–500 ft. high, extending parallel to the river for about 7 miles. The north summit of this ridge has a small pagoda on it, and near it is a village. The shore on the west side of Elgin Reach is mostly low, covered with reeds, and steep-to. There are hills, 150 ft. high, a mile and a quarter inshore, about 3 miles up the reach, and again opposite the upper end of Pheasant Island. Rosina Rock lies 70 yds. off shore here, in front of a small bluff, and just south of the entrance to a creek, near which is a village.

Now come a series of islands, of which the largest is Wade Island, 8 miles in length and 3 miles in breadth. There are various channels between these islands, which are sometimes navigable and sometimes closed. On the right bank of the Yangtse, opposite Wade Island, is the walled town of **Tsaishih,** situated on a low hill about 1,500 yds. from the river (see Route 18). Here the ridge of hills above-mentioned comes to an end, and the country is low until within a mile or so of **Taiping An.** This prefectural city stands at the mouth of the Shui-yang Ho, 220 ft. wide and 20 to 30 ft. deep, which runs in a south-easterly direction towards a range of hills 1,500 ft. high, 5 miles inshore. On the left bank, opposite May Queen Island, is the opening of a canal which leads to the cities of **Hochow An** (see Route 39) and **Hanshan.** Another canal, the Wei Ho, abreast of the southern part of Wade

Island, leads to Chaohsien and the Ch'ao Hu, a large lake. The channel above Taiping An, between Jones Island and the right bank, is no longer used for navigation, though previous to 1905 it was the only channel by which vessels could ascend to Wuhu or places beyond. Near its southern extremity, on the right bank, is the village of Tang-tu.

About $3\frac{1}{2}$ miles above the south end of Wade Island are two rugged cliffs, Hsi-liang Shan on the left, and Tung-liang Shan on the right side of the river; they are about 250 ft. high, and are fortified. These are called 'The Pillars', and the pass between them, T'ien Mên, is about 8 cables in width. Immediately above T'ien Mên is a low flat island, $2\frac{1}{2}$ miles long by 2 broad, with a semicircular channel round its north and west sides. South of it is a tongue-like projection from the left bank, with a waterway west of it leading to the village of **Yü-ch'i.** From here another creek goes off to the Ch'ao Hu, joining the Wei Ho several miles inland. About 4 miles southward from the East Pillar is Morton Point, the western foot of a hill 500 ft. high, with Dearborne Island opposite. Two miles to the NE. there is another hill, near which the ground is cultivated and there are some villages. The navigable channel runs between Morton Point and Dearborne Island. At 53 miles above Nanking the important commercial town of **Wuhu** is situated on the mouth of the Yang-ki Ho (or Kuei-hsi Ho), a river which, with its tributary the Tai Ho, is navigable for junks and steam-launches to Ningkwofu (see Route 16).

NOTE.—The information in the above article has been drawn chiefly from the following sources:

(1) *The China Sea Pilot*, vol. v (1st edition, 1912).
(2) *Yangtse Kiang Pilot* (1st edition, 1914).
(3) Admiralty Charts of the Yangtse Kiang: Sheet I, Shanghai to Nanking; Sheet II, Nanking to Kiukiang.
(4) War Office MS. maps of Southern Chiang-su: Fêng-yen, Shanghai, Lou-wu-k'ou, Kiangyin and Nanking sheets.
(5) War Office map of Northern Chiang-su, southern sheet (blue print).
(6) *Military Report on the Province of Chiang-su.*

As regards the names and situation of villages, where there is a conflict of authority between the *Yangtse Kiang Pilot* and Admiralty Charts on the one hand and the War Office maps on the other, the latter have been followed by preference.

CHAPTER VIII

THE GRAND CANAL

History and Description—Navigation—Communications in North Kiangsu and South Kiangsu.

History and Description

The Grand Canal—known to the Chinese under the names of *Yü Ho* (Imperial river), or *Yün Ho* (transport river), or *Yün-liang Ho* (grain transport river)—traverses the whole province of Kiangsu from north to south in a line almost parallel to the sea coast. Beyond Kiangsu it continues north through Shantung into Chihli, and after passing through Tientsin, finally ends at Peking. The southern terminus is Hangchow, an important Treaty Port in the Province of Chekiang.

The waterway connecting the Yangtse River with Canton, via the Tung-t'ing Lake and the rivers Hsiang Kiang, Kuei Kiang and Si Kiang (West River), is also generally considered as a continuation of the Grand Canal, so that the latter constitutes, at all events at certain seasons of the year, an uninterrupted water route between Peking and Canton. Before the advent of railways it was the most important means of communication between North and South China. Through lack of dredging and general neglect the usefulness of certain sections has, however, been seriously impaired.

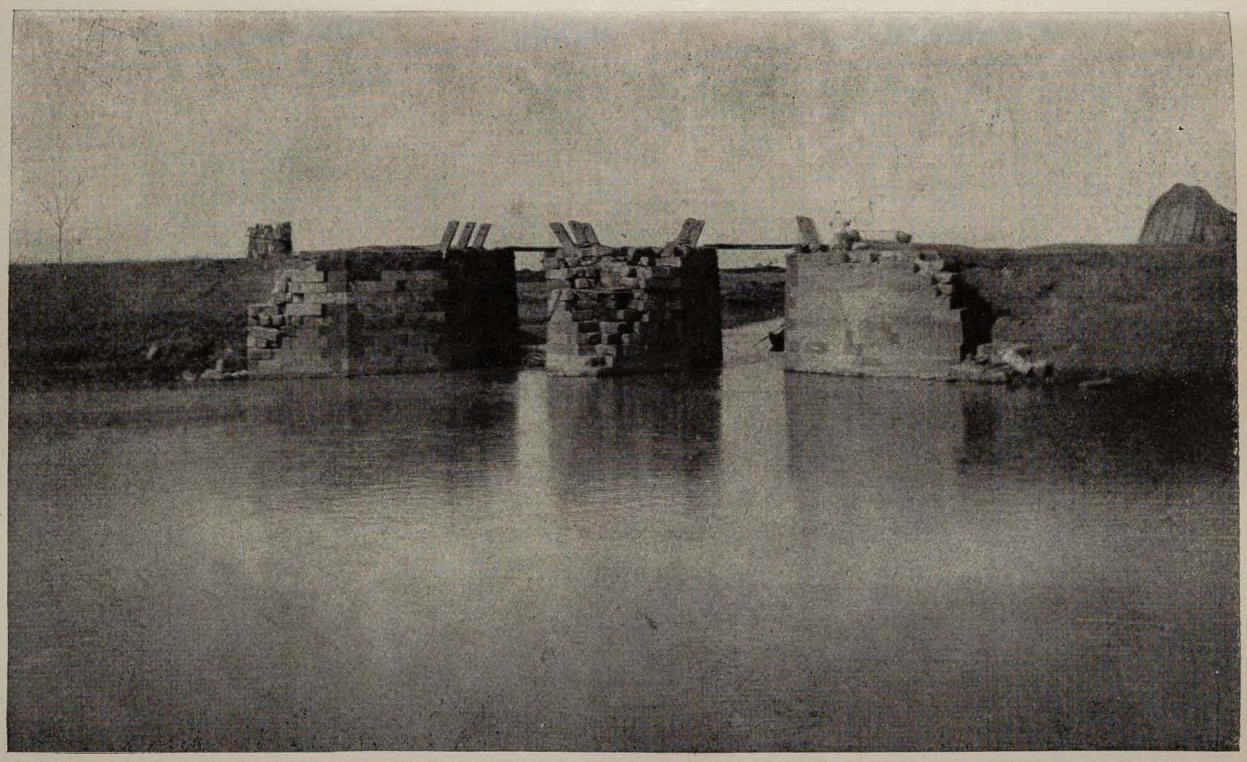
The existing canal is not the result of a well thought out scheme but the outcome of experiments carried out through many centuries and brought to a successful issue after repeated failures. The earliest attempt to connect the Yangtse with the Huai River goes back to the fifth century B. C. The section from Hangchow to Chinkiang on the Yangtse was built early in the seventh century A. D. The northern part,

as far as Peking, is stated to have been constructed in the three years A. D. 1280–3.

The Grand Canal, like most canals of China, was made to serve a double purpose : primarily to supply an easy means of communication, but also to provide a system of drainage and irrigation. This is particularly apparent in Kiangsu. With the exception of the district around Nanking, the whole province is one immense alluvial plain, rising very little, if at all, above sea-level. The thickly populated and fertile region north of the Yangtse and east of the canal lies, for the most part, below the level of the canal bed, the volume of water rising from 7 to 22 ft. above the adjacent plain. This state of affairs is largely due to the fact that waterways silt up rapidly in China, and that the Chinese, instead of dredging the beds, prefer to raise the embankments of their canals.

Embankments.—The embankments of the Grand Canal consist of earth actually thrown up when the bed of the canal was cut, further reinforced by soil taken from the adjacent plain. The eastern embankment measures about 100 ft. at the base and 30 ft. at the top. The western embankment is somewhat narrower (about 80 ft. at the base, 10 ft. at the top). To break the power of the current, convex surfaces of the bank have been faced with limestone to the height of some 14 ft. Elsewhere the level, wherever necessary, has been reinforced by brick-work or reed fascines. Extensive use of masonry has been made in the southern section of the canal (i. e. between Hangchow and Chinkiang). The top of the embankment provides a convenient *towpath*, but the available room is greatly reduced by the numerous houses which line the waterway. (For further details see Routes 1 and 19.)

The Grand Canal in Kiangsu and Shantung is fed by a series of *lakes* situated along its western bank. These lakes act like impounding reservoirs, storing up the waters supplied by inland rivers, and releasing it as required for the maintenance of a sufficient navigable channel. Owing to the unsatisfactory condition of the flood-gates and of the embankments, both of the lakes and of the canal, this object cannot



FLOOD-GATES ON THE GRAND CANAL (BETWEEN CHINKIANG AND TSINGKIANGPU)

always be achieved, and certain sections north of Tsingkiangpu occasionally run dry in the winter months.

In order further to regulate the flow of water in the canal three devices have been applied :

(*a*) *Floodgates* or *spillways* (Chinese *tung*), usually 6 ft. (at most 10 ft.) wide in gap, have been provided at intervals and at a certain height along the eastern bank. Through them the surplus water is diverted into the neighbouring rice fields.

(*b*) *Locks* or *weirs* (Chinese *cha*), built across the canal, with a removable centre part consisting of large beams slipped one above the other into sockets of masonry. When the beams are removed, they provide an opening of about 22 ft. in width. The difference of level above and below the lock is often considerable, as much as 2 ft. Ascending boats have to lighten and be dragged over ' haulovers ' by means of capstans and cables, requiring the services of hundreds of coolies. Needless to say, these locks are a great impediment to navigation. There are four of them in Kiangsu, one in Tsingkiangpu, and three others a few miles above it (see Route 19 (2)). They become more frequent as one goes north, but they are less formidable. There are 33 in Shantung ; the most difficult of them (between Taierhchwang and Hanchwang) have a change of water-level of only 3 to 6 inches, and appear to give little trouble even to the largest boats.

(*c*) *Movable barriers* (Chinese *pa*), a few hundred feet in length, consist of reed fascines and earth resting on a stone foundation. In times of flood pressure is relieved by removing a few reed fascines. The water rushing through the small gap soon enlarges it and sweeps the whole barrier away. A network of canals and drains leads the water eastward towards the sea. But the country, being low-lying, serious inundations are bound to ensue. Furthermore, the barriers once removed cannot be rebuilt until the waters are quite low again. Recourse is had to this expedient, therefore, only in case of absolute necessity, to prevent the pressure of the water from bursting the embankments. There are five such

barriers in Kiangsu, four in the neighbourhood of Kaoyuchow and one farther south near Yangchow.

Bridges.—South of the Yangtse the Canal is spanned at frequent intervals by stone bridges, some of one arch, others of several arches. In addition there is a railway bridge north of Sinfeng Ku (mile 137·4 of Shanghai–Nanking Railway).

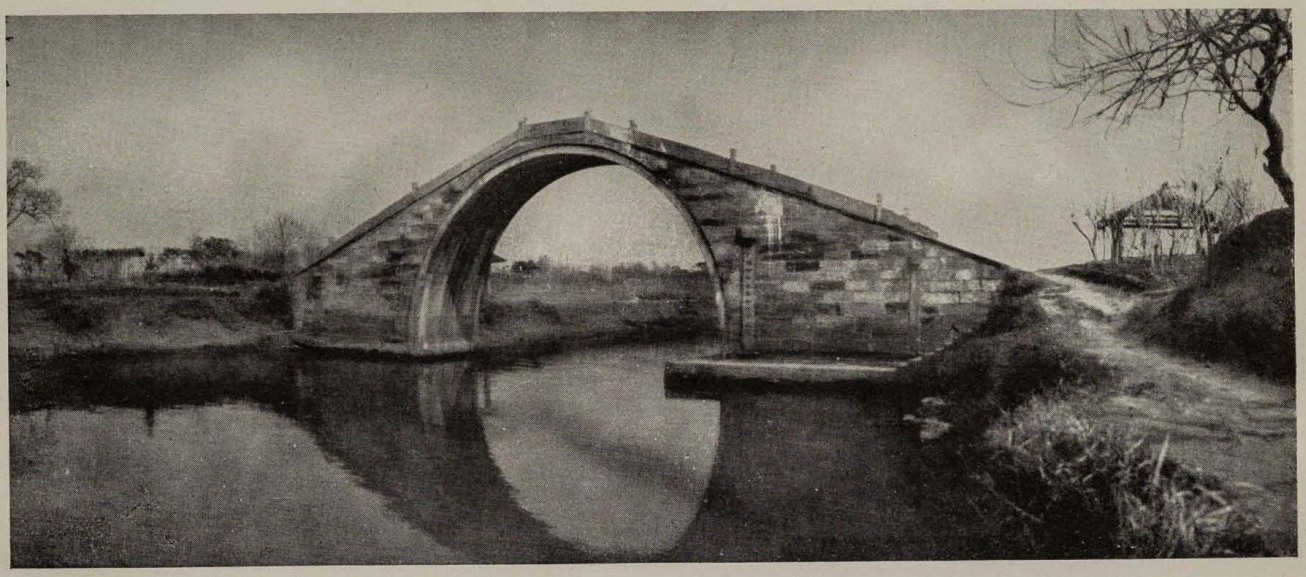
North of the Yangtse, stone bridges are replaced by pontoon bridges. The roadway (9 ft. wide) is constructed of planks, so arranged that those in the centre can be removed for the passage of boats. At present one railway bridge crosses the Canal just south of Hanchwang (about 238 miles from Pukow, on the Tientsin–Pukow line) ; two others are projected, one at Yangchwang Ku above Tsingkiangpu (where for some time a steam-ferry connected the two sections of the Tsingkiangpu–Süchowfu line—see railway No. X), and the second at Kwachow (Icheng–Taichow Ku line—see railway No. XVI).

Customs.—There are many Custom-houses along the Grand Canal, some collecting dues on behalf of the central government, others, more numerous, on behalf of local mandarins. Chief among the former are those located at Hangchow in the Province of Chekiang, Soochow, Chinkiang, Kwachow, Yangchow, and Sutsien in Kiangsu, and Lintsingchow in Shantung. The local customs or *likin* are distributed along the whole length of the Canal. They are particularly numerous in North Kiangsu. Gandar (1894) mentions no less than 50 likin stations between Kwachow and Tsingkiangpu. The dues and exactions levied by them greatly increase the cost of freight, and the frequent stops and searches to which boats are subjected seriously reduce the speed of traffic. At most stations, to prevent smuggling, a wooden barrage is thrown across the Canal during the night ; all boats being held up between sunset and sunrise.

Navigation on the Grand Canal

From the point of view of navigation the Grand Canal may be conveniently divided into 4 sections :

(1) **Hangchow** to **Chinkiang.** Distance about 200 miles, of



BRIDGE OVER GRAND CANAL NEAR SHIHMEN CHE (ZA-MEN)

which 135 miles are situated in Kiangsu and the remainder in Chekiang. The Canal lies in long, straight reaches, is of a fairly uniform width of 40 yards, and except towards Chinkiang, where a gradual silting up of the Yangtse is taking place, its navigation within the limits of Southern Kiangsu presents no difficulties. The original course of the Canal runs under the southern wall of Chinkiang, and has an exit into the Yangtse near the British Concession. In winter this is completely silted up, and traffic reaches the Yangtse through Tantu (some 10 miles below Chinkiang) by leaving the Canal and following a tortuous river bed. At other points also navigation becomes difficult owing to the shallowness of the water; this is the case particularly at Tanyang (some 20 miles south of Tantu) and to some extent also at Shihmen Che and Shihmenwan, about half-way between Kashing and Hangchow. Some of these shoals can, however, be avoided by following side canals (see Route 1 B). The depth is usually sufficient all the year round for launches drawing $4\frac{1}{2}$ ft., and in most places is far greater than this. The Canal is tidal from south of Tanyang to the Yangtse. There is a very slight current from the direction of Hangchow.

(2) **Chinkiang** to **Tsingkiangpu.** Distance about 111 miles. This section really begins at Kwachow on the Yangtse, opposite Chinkiang. In summer, when the Chinkiang end of the Canal is navigable, boats coming from the south will cross the river from Chinkiang (a distance of $3\frac{1}{4}$ miles), but during the low-water season the traffic must go through Tantu (about 12 miles below Kwachow). As the wind is generally easterly, the connexion between Tantu and Kwachow is unattended by difficulty.

Between Tsingkiangpu and Paoying the width between the banks is as a rule about 100 yds., and that of the waterway in winter about 50 yds. Below Paoying these dimensions decrease by one-half for some 20 miles, after which they gradually increase again up to Liu-cha. South of Liu-cha the course of the Canal is through the shallow Shaopo Lake for $1\frac{1}{2}$ miles; after which it again becomes a definite water-

way 100 yds. wide, gradually narrowing in the next 4 miles to an average width of 50 yds., at which it continues.

The winter depth ranges from 3 to 15 ft. It varies considerably, but the average increases from north to south. The tide is felt as far north as Yangchow. The current is generally running south, but occasionally, owing to the influence of the Yangtse and other causes, it runs north in some sections at certain times of the year. As a rule the current is sluggish ; but there are places, particularly along the walls of Yangchow city, and in the last few miles before the Yangtse is reached, where it flows at the rate of fully 4 miles an hour. This section of the Canal is fed by the Huai Ho, the waters of which are stored in a series of lakes distributed along the west bank of the Canal (Hung-tsê Hu, Poying Hu, Kaoyu Hu, and Shaopo Hu). Except across the Shaopo Lake, there is an unbroken path throughout on the top of the bank, and towing is always possible. (For further details see Route 19.)

Through gradual silting up of the Canal, navigation appears to become year by year increasingly difficult. The following remark, contained in a recent Post Office Report (1913), is significant, and applies chiefly to sections (2) and (3) of the Canal : ' During the high-water season steam-launches are not allowed to ply along the Canal and inland waterways, as their passage causes the water to overflow the banks ; while in the winter they are prevented from running by the shallowness of the water.'

There is hope that at no distant future its course may be considerably improved. A scheme elaborated by the commission sent out under the auspices of the American Red Cross Society (July 1914) contemplates the increased navigability of the Grand Canal, by (*a*) bringing under control the waters of the Huai Ho, (*b*) draining the Hung-tsê district, (*c*) building locks in the Canal between Chinkiang and Tsingkiangpu. More important still is the fact that the Chinese Government is at last giving to conservancy work the attention which it deserves. Conservancy bureaux have been

established in many provinces under the general supervision of the National Conservancy Bureau at Peking. Thanks to these efforts navigation should be greatly facilitated within the near future.

Even as it is, this section of the Grand Canal offers the best means of communication between North and South Kiangsu. It is frequented by thousands of native boats, and a regular service of steam-launches and tugs is maintained by the Nisshin Kisen Kaisha (a Japanese company), the Tai-sêng-tsang, and the China Merchants' S. N. Co. These launches draw from 2 to 4 ft. of water, and tow either one or two large passenger-boats, each licensed to carry an average of about 160 Chinese, and capable of accommodating 100 lightly equipped infantry soldiers. The maximum speed of a steam-launch with a full load probably does not exceed 7 miles an hour in slack water.

(3) **Tsingkiangpu** to the **Yellow River** (Huang Ho). Distance about 930 li, say 280 miles, of which 400 li, say 120 miles, are in Kiangsu, the remainder (i.e. about 160 miles) being in the province of Shantung. In respect of physiographical conditions it differs entirely from section (2). It has been cut across the western spurs of the Shantung mountains, which completely shut it off from the sea.

In order to feed the Canal during the low water season important engineering works had to be undertaken, such as the construction of large barriers along the beds of the Wên Ho and of the Tzŭ Ho. On the other hand, numerous lakes along the Canal (e.g. Shu-shan Hu, Tu-shan Hu, Chao-yang Hu, and Wei-shan Hu) were used as storage basins and supplied with locks to regulate the amount of water. Many of the works are still in good condition, but in most cases the channels leading to and from these lakes are silted up, with the result that the latter no longer fulfil their object, but indeed are mere swamps or partly under cultivation. The South Grand Canal Conservancy Bureau in Shantung began a survey of the whole district early in 1915, and have elaborated a scheme whereby the lakes shall revert to their true function

of regulating the water-level of the Grand Canal, and the state of the latter shall be further improved by the dredging of shallow parts.

Until these improvements are carried into effect, navigation on this section must continue to be increasingly difficult. At various points steadily growing sandbanks threaten to block up the fairway altogether. This is particularly the case between Hanchwang and Tsining, where in winter the depth is often less than two feet. (In summer there would be enough water for boats of 4-ft. draught.) The comparatively high level of the bed of this section of the Canal presents difficulties which cannot be overcome altogether. The numerous locks, even if they were in good working order, must of necessity retard the progress of boats. Under present conditions traders generally avoid them, especially those locks situated immediately north of Tsingkiangpu, and prefer to continue their journey by land.

The width of the Canal varies considerably, but is seldom less than 80 yds. The current is very weak except at the two extremities. It runs south from Taierhchwang to Tsingkiangpu and north from Liukiakow to the Yellow River. In winter the Canal north of Tsingkiangpu is generally ice-bound for about two months. South of the same town, except in abnormal years, the ice never seriously interferes with the traffic.

(4) **Yellow River** to **Tientsin** and **Peking.** Distance, about 1,540 li, say 462 miles. This section lies entirely in Shantung and Chihli. Between the Yellow River and Lintsingchow it is quite dry during the greater part of the year (the bed of the Canal being several feet above the low-water level of the Yellow River). In the high-water season it silts up so rapidly that the locks are usually kept closed. Moreover the passage of the Yellow River is not without danger, both on account of the rapidity of the current and the number of villages and walls submerged by the river when it changed its course in 1852. From Lintsingchow to Tientsin the Canal follows the winding course of the Wei Ho, which has been embanked. It is rather narrow and shallow between Lintsingchow and

Tehchow (20 to 40 yds.), but widens and deepens beyond the latter town. Shallow-draught steam-launches run on this section, the traffic increasing as one approaches Tientsin. A regular service of passenger-boats, maintained by the 'Etablissements de Tongku' (Tangku), has occasionally to be suspended during the summer floods, for fear of damage to the banks of the waterway. For part of the winter the Canal is ice-bound.

Communications with the Grand Canal

(A) *South Kiangsu*

(1) There is direct **access from the sea** to the Grand Canal :

(*a*) Via Chinkiang, Tantu, Tushan and Penniu (Route 1 A).

(*b*) Via Shanghai and Kashing (Route 3).

(*c*) Via Shanghai and Pingwang (Route 4).

(*d*) Via Shanghai and Soochow (Route 5). For shallow boats only.

(*e*) Via Kiangyin (Routes 14 and 15).

(*f*) Via Tanyang Creek and other small creeks between Kiangyin and Tantu.

(*g*) Via Wuhu (Route 16).

N.B. At Hangchow there is no communication with the sea, as the estuary of the Ch'ien-t'ang River is not navigable.

(2) The Grand Canal is also connected with the following **inland waterways** :

(*a*) At Hangchow with the navigable section of the Ch'ien-t'ang River, by means of a small canal.

(*b*) At Pingwang and at Tangsi with a creek leading to Huchowfu (Route 1 B).

(*c*) At Soochow with the T'ai Hu or Great Lake (Route 1 C).

(*d*) At Loshe (near Wusih) with Wuhu on the Yangtse (Route 16).

(3) The following **railway lines** lead to the Grand Canal :

(*a*) Shanghai–Hangchow line at Kashing, and again at Hangchow by the Kung-ch'ên-ch'iao branch (see Chap. IX, railway No. V).

(*b*) Shanghai–Nanking line at Soochow. From Soochow to Chinkiang the railway runs almost parallel to the Grand Canal. At Sinfeng Ku it crosses from the eastern to the western bank (see railway No. I).

(*c*) Soochow–Changshu Ku line (projected 1916, see Chap. IX, railway No. XI).

(*d*) Ningpo–Hangchow line (under construction, 1916, see railway No. V).

(*e*) Wuhu–Hangchow line (under construction, 1916, see Chap. IX, railway No. XIII).

(**4**) **Roads** connected with the Grand Canal :

(*a*) A fairly good road or towpath runs along the Canal the whole way.

(*b*) Tanyang–Nanking road (Route 17 B).

(*c*) Chinkiang–Nanking road (Route 17 A).

(B) *North Kiangsu*

(**1**) **Access to the sea** for larger boats is only possible through Kwachow on the Yangtse.

But shallow boats can reach the sea from the Grand Canal :

(*a*) Via Yencheng Ku (Route 25).

(*b*) Via Fowning (Route 26).

(*c*) Via the Yen Ho (No. 1) (Route 28 A). Note, however, that both near Tsingkiangpu and at Sinpuchen boats have to be hauled over the dikes which seal up the extremities of the Yen Ho.

(**2**) The only **inland waterway** of any importance is the Huai River, which can be reached from the Grand Canal :

(*a*) Via Tsingkiangpu, at all times of the year (Route 35).

In summer also

(*b*) Via Kaoyuchow
(*c*) Via Ma-p'êng-wan } (Route 19 (1)).
(*d*) Via Liu-man-cha

(**3**) The following **railway lines** join the Grand Canal :

(*a*) The Tientsin–Pukow Ku line, which crosses the Canal

south of Hanchwang in Shantung, close to the border of Kiangsu (see Chap. IX, railway No. VI).

(*b*) The Tsingkiangpu–Süchowfu line, under construction, will cross the Canal west of Tsingkiangpu (in 1912 steam-ferries linked up Tsingkiangpu with the rest of the line, see Chap. IX, railway No. X).

(*c*) The projected Icheng–Taichow Ku line will cross the Canal at Kwachow (see railway No. XVI).

(*d*) The Tsingkiangpu–Haimenting line will follow the east bank of the Canal (projected—see Chap. IX, railway No. XV).

(*e*) At Taierhchwang a colliery line links up the Canal with coal-fields of Yihsien (Shantung—see Chap. IX, railway No. VIII).

(**4**) The following **roads** are connected with the Grand Canal :

(*a*) The road along the bank of the Grand Canal continues, except through lake Shaopo (Route 19 (1)).

(*b*) Yangchow–Pukow Ku road (Route 36 B).

(*c*) Kwachow–Pukow Ku road.

(*d*) Tsingkiangpu–Haichow roads (Routes 28 B, C, and D).

(*e*) Tsingkiangpu–Sutsien–Ichowfu road (Route 32 A).

(*f*) Sutsien–Süchowfu roads (Route 33).

CHAPTER IX

RAILWAYS

Historical Note—Railways in operation—Railways under construction —Projected Railways.

Historical Note

In a country where made roads are practically non-existent, and traffic is almost entirely confined to congested waterways, the strategic value of railways must be greatly enhanced. Even if little rolling-stock be available, the railway tracks will prove invaluable, and afford in many cases the sole means of conveying heavy artillery and supplies to the interior.

Kiangsu was the first province of China to possess a railway. The line from Shanghai to Woosung was constructed in 1876. The gauge was 30 in. and the rails were 26 lb. to the yard. It was the work of a private British company, who bought the land necessary for the ostensible purpose of a public road, and did not disclose their real object to the Chinese authorities until the scheme was far advanced. The line was opened for traffic in July, 1876, and proved popular; but a month afterwards a Chinese was run over, and this accident led to official interference, the purchase of the line by the Chinese Government, its demolition in 1877, and the removal of the rails and rolling-stock to Formosa.

It was not till after the Chino-Japanese War that a serious breach was made in the wall of Chinese prejudice against railways in the Yangtse region. Viceroy Chang Chih-tung advocated them, and a beginning was made once more on the 10-mile stretch between Woosung and Shanghai in 1898.

This short railway, of standard gauge, was built by Chinese capital under the direction of the celebrated Taotai Shêng Hsüan-huai.

The 'battle of concessions' was strenuous in 1898. As a result of strong diplomatic pressure the British Government obtained for a British financial combination, known as the British and Chinese Corporation, a concession to build several railway lines in South Kiangsu, Chekiang, and elsewhere. In 1899 the British and German interests arranged to finance, jointly, the construction of the Tientsin-Pukow railway. The Boxer rebellion of 1900 caused the question to remain in abeyance for some years. Actual construction of any of the main lines of Kiangsu was not begun until 1903. Since then, however, progress has been rapid. At the present moment (1916) the lines operated within the province amount to some 378 miles, those under construction to 120 miles, whilst projected lines, if carried out, will add at least 389 miles of railway, bringing the total mileage to 887 miles, or an average of 23 miles of rail to every thousand square miles. The detail is set out in the following table :

Name of Railway.	*Total Mileage.*	*Mileage in Kiangsu.*
(A) *Railways in operation*		
I. Shanghai–Nanking . . .	193·3	193·3
II. Shanghai–Woosung . . .	10·2	10·2
III. Shanghai Loop Line . . .	10·2	10·2
IV. Nanking City	8	8
V. Shanghai–Hangchow (–Ningpo) .	220	38
VI. Tientsin–Pukow . . .	628·4	61·5
VII. Kaifeng–Süchowfu . . .	175	(?) 57
VIII. Tsaochwang–Taierhchwang (Shantung)	26	—
(B) *Railways under construction*		
IX. Pukow–Sinyangchow (Honan) .	346·7	—
X. Süchowfu–Tsingkiangpu . .	120	120

Name of Railway.	*Total Mileage.*	*Mileage in Kiangsu.*
(C) *Projected railways*		
XI. Soochow–Changshu Ku . .	16	16
XII. Wusih–Kiangyin . . .	25	25
XIII. Nanking–Changsha (Hunan) .	(?) 800	25
XIV. Tsingkiangpu–Haichow . .	70	70
XV. Tsingkiangpu–Tungchow (or Haimenting) . . .	(?) 170	(?) 170
XVI. Icheng–Shiherhwei–Kwachow–Taichow Ku . . .	48	48
XVII. Pukow Ku–Icheng (or Kwachow)	(?) 35	(?) 35
XVIII. Kaomi–Hanchwang (Shantung)	220	—

All the railways of Kiangsu are of standard (4 ft. 8½ in.) gauge.

(A) RAILWAYS IN OPERATION

I. Shanghai-Nanking (or Hu-Ning) Railway

A preliminary agreement providing for the construction of this line was drawn up on May 13, 1898, but the final agreement was delayed by the Boxer outbreak of 1900 and was not concluded until July 9, 1903.

The essential terms of this agreement were :

1. The issue by the British and Chinese Corporation of a loan not exceeding £3,250,000. Imperial Chinese Government bonds for that amount were to be issued and the railway was pledged as security therefor.

2. The construction and operation of the railway was to be controlled by a Board of Commissioners, two British, two Chinese, and an Engineer-in-Chief (British), five in all. In case of disagreement between the Chinese and British members, the Director-General of the Imperial Chinese Railway Administration and the Agent of the British and Chinese Corporation were to adjust the dispute amicably.

For the important offices of the railway foreigners of ability and experience were to be employed.

A railway police of Chinese with Chinese officers was authorized, their maintenance and wages to be wholly defrayed by the railway.

3. The then existing Woosung–Shanghai railway was to be taken over as part of the Shanghai–Nanking system and treated as part of that line, at the price of Tls. 1,000,000 or £125,000.

4. 'In case of military operations, whether on account of foreign war or internal insurrection, the movement of troops, ammunition and stores by the Chinese Government, and in case of famine or other great calamity the dispatch of relief, shall, on the requisition of the Director-General, have preference over the line at half of the tariff rates' (Article 19).

The control previously exercised by the Anglo-Chinese Board has since been transferred by mutual consent to a Chinese director, and the line is now under the direct management of the Chinese Government.

The first section of 12 miles was opened in 1905, and Nanking was reached early in 1908. The line was well laid and well equipped, but owing to the competition of water-borne traffic it has not been a commercial success so far. The situation, however, has improved of late. Both freight and passenger traffic is steadily increasing. The increase would be more rapid still if, on the one hand, the ferries now plying between Nanking and Pukow Ku were replaced by train-ferries, whereby railway wagons could be ferried across from one station to the other without breaking bulk, and if, on the other hand, the Chinese management would provide the necessary rolling-stock. But even with these handicaps the line (according to 1916 reports) is now paying expenses.

General Description

Track.—The line is 193 miles long, of standard (4 ft. 8½ in.) gauge, and single throughout, but on the section between Shanghai and Soochow (mile 53) the earthwork and bridges

have been made to take a double line. The rail used is a flat-bottomed 85-lb. rail in lengths of about 36 ft. No chairs are used, the rail being spiked direct to the sleepers, which are of Jarrah wood. Ballast (granite for the first 144 miles) is plentiful and good, and the track is maintained in first-class condition in every way.

Curves and gradients.—The greater portion of the country traversed by the line is absolutely flat, and there are no steep gradients or sharp curves. The sharpest curves are of 3 degrees or 1,910 ft. radius, and of these there are only two in the whole line. The ruling gradient is 1 in 200.

Bridges.—Between Shanghai and Nanking there are 303 bridges, with a total waterway of 5,857 lineal feet. They are particularly numerous from Shanghai to Wusih (mile 80), because although there are no bridges of larger span than 60 ft., 164 navigable canals and creeks have to be crossed, an average of just over two bridges per mile. From mile 80 to mile 144, near Chinkiang, there are rather more than one a mile, the work, however, being of a heavier nature. From mile 144 to Nanking the bridges are mostly minor openings, as, owing to the more hilly nature of the country, there are few defined main creeks. Three types of bridges are generally adopted, viz. abutments with splay wing walls, abutments with straight return wing walls, and pier abutments. Wherever possible, where headway permitted, arched superstructure was adopted, but in the majority of cases steel-girder superstructure had to be used. Most of the creeks crossed being navigable, sufficient headway for boats had to be given; this was invariably fixed from that of the lowest existing bridge on the creek. The piers and abutments are constructed of brickwork on concrete foundations between Shanghai and Soochow, of coursed granite set in cement on concrete foundations between Soochow and mile 144, and from that point to Nanking of cement concrete. There are no very big bridges on the line, and deviations with low-level temporary bridges could be easily constructed in case of damage to the permanent bridges.

The first bridge of any importance occurs at mile 30 after leaving Shanghai. The line here crosses the Hsing-yang Chiang by a bridge of four spans of 40 ft., with two 20-ft. arches on either side. The next important bridge occurs at mile 36·88, where the line crosses a creek west of Kunshan. The bridge consists of three spans of 60 ft. Other important bridges are : at mile 52·12, over Soochow to Changshu Ku Creek (1 girder span of 60 ft., 4 arches of 20 ft.) ; at mile 54·5 (1 girder span of 40 ft., 4 arches of 20 ft.) ; at mile 67 (1 girder span of 60 ft., 3 girder spans of 30 ft.) ; at mile 83, over Wusih to Kiangyin Creek (1 girder span of 60 ft., 2 girder spans of 30 ft.) ; at mile 137·4, over Grand Canal (3 girder spans of 60 ft.).

Tunnels.—The only tunnel on the line is situated at Chinkiang, the railway being taken through Fort Hill on a falling gradient of 1 in 300 to Chinkiang station. This tunnel is 1,320 ft. long and is wide enough to take double line. The shaly nature of the rock passed through necessitated the arching of the roof and the lining of the side-walls with brick throughout the length of the tunnel.

Rolling-stock.—The total amount of rolling-stock available for use on the line in December 1915 can be classified as follows :

Locomotives :

	Type.	*Number.*
Passenger	4—4—0	12
,,	4—2—2	4
,,	4—4—2	4
,,	2—4—2	3
Goods	4—6—0	10
Shunting	4—6—2	2
,,	0—6—0	2
	Total	37

Carriages :

	Number.	*Total carrying capacity.*
1st Class Cars, ordinary . .	4	310 men.
1st Class Cars, ordinary, with Kitchen	5	230
2nd Class Cars, ordinary .	3	216
3rd Class Cars, ordinary .	39	4,418
Coolie Class Cars . . .	19	1,084
Composite :		
1st and 2nd Class Diners .	7	420
1st and 2nd Class, ordinary .	4	274
1st, 2nd, 3rd, and Brake .	1	90
3rd Class, miscellaneous . .	16	1,124
Brake and Baggage Vans .	3	—
Totals	101	8,166
Goods Wagons :		
Covered	304	7,218 tons
Open	90	2,555
Adapted for special purposes .	44	1,173
Totals	438	10,946

Speed.—In May, 1908, the first through train covered the distance of just over 193 miles in 5 hours 37 minutes (including stoppages). Fast passenger trains run between Shanghai and Nanking at an average speed of 32 miles per hour, including stops. The average speed of slow passenger trains is 20 miles per hour. In April, 1916, three express trains were running daily from each end—one express train in the forenoon, one special express in the afternoon, and a night express (with sleeping-car attached). The afternoon express covered the distance in about 6 hours, the night express in 8 hours ; while the ordinary passenger train took 10 hours.

TIME TABLE FROM MAY 1915 TO APRIL 1916

Shanghai .	*dep.*	7.35 a.m.	1.05 p.m.	11.00 p.m.
Soochow .	*arr.*	9.40	2.37	1.00 a.m.
Wusih .	„	10.40	3.27	2.09
Changchow.	„	11.40	4.16	3.14
Chinkiang .	„	1.25 p.m.	5.41	5.14
Nanking .	„	3.04	7.00	7.00

Nanking .	*dep.*	7.30 a.m.	1.20 p.m.	11.00 p.m.
Chinkiang .	*arr.*	8.57	2.37	12.46 a.m.
Changchow.	„	10.47	4.09	2.53
Wusih .	„	11.46	4.59	4.11
Soochow .	„	12.47 p.m.	5.54	5.14
Shanghai .	„	2.50	7.35	7.00

Workshops.—The workshops are situated at Woosung, near the bank of the Huang-p'u river. A jetty with two lines of rails has been provided, and it is equipped with shears and a crane for loading heavy materials. The workshops have not been extended since 1911, but they are well equipped with modern machinery, and in charge of a British locomotive superintendent. They are capable of undertaking all heavy maintenance and repair work, and constructional superstructure of passenger coaches and goods wagons.

List of Stations.—There are 37 stations between Shanghai and Nanking inclusive. Exclusive of the terminal stations and that at Soochow, they may be classified as follows :

1. Passing stations, provided with loops 2,500 ft. in length for crossing trains, and up and down passenger platforms, 25 in number. (In the list below the names of such stations are preceded by an asterisk *.)

2. Flag stations, provided with one platform and buildings commensurate with traffic requirements, but no sidings or passing accommodation.

The platforms are 2 ft. 3 in. above rail-level.

The terminus at Nanking is on an embankment, the only possible site for the station yard being on low swampy ground on S. bank of the Yangtse, subject to annual inundation,

which involved raising the yard to an average height of 15 ft.

Mileage.	*Railway name.*	*Post Office (or Wade) name.*
0	*†Shanghai, North	Shanghai.
4·68	Chen-ju	Chenju.
10·70	*Nan-siang	Nansiang.
14·53	Hwang-tu	Hwangtu.
20·03	*An-ting	Anting.
26·31	*Lu-kia-pang	Lukiapeng.
30·00	Hen-li	(Hêng-li).
31·95	*†Kun-shan	Kunshan.
38·75	Chen-i	Cheni.
42·66	*Wei-ting	Weiting.
48·29	*Wai-kua-tang	Waikwatang.
51·17	Kwan-tu-li	(Kuan-tu-li).
53·47	*†Soochow	Soochow.
61·19	*Hu-shu-kwan	Hushukwan.
66·60	*Wang-ting	Wangting.
73·07	Chow-king-hang	(Chou-ching-hsiang).
76·85	Wu-sih Flag	Wusih.
79·80	*†Wu-sih	Wusih.
86·25	Tsar-down-wan	(?)
88·20	Lo-she	Loshe.
93·32	*Heng-lin	Wanglin.
97·07	Tsi-shu-yen	Chishuyen.
103·94	*†Chang-chow	Changchow Ku.
109·45	Lu-kia-tsun	(Lo-chia-ts'un).
115·01	* Pen-niu	Penniu.
119·67	Lu-cheng	Lücheng.
125·99	Ling-kow	(Ling-k'ou).
131·77	*†Tan-yang	Tanyang.
136·79	*Sin-feng	Sinfeng Ku.
147·82	Chinkiang Flag	Chinkiang.
150·34	*†Chinkiang	Chinkiang.
158·27	*Kao-tze	Kaotze.
159·86	Tan-chu	(T'an-chu-chên).

Mileage.	*Railway name.*	*Post Office (or Wade) name.*
165·55	*Sia-shu	Siashukai.
172·33	*†Lung-tan	Lungtan Ku.
178·26	Lone-tree-hill	(Ku-shu-ts'un).
183·94	*Yao-hwa-men	Yaohwamen.
188·41	Tai-ping-men	(T'ai-p'ing-mên).
193·32	*†Nanking	Nanking.

* Stations with one or more sidings.
† Stations with water storage.

Country bordering the Railway

The country traversed by the line may be divided into two portions, an eastern and a western, which differ widely in their main features. Taking Tanyang (mile 132) as the dividing point, the area to the E. may be regarded as flat delta country, and that to the W. as upland.

The principal characteristics of the former are flatness, numerous waterways, fertility, and dense population, in all of which respects it differs widely from the western area. It is a low-lying alluvial plain formed from the silt deposited by the waters of the Yangtse. Here and there are solitary hills rising abruptly to a height of 600 or 700 ft. above the plain; these were doubtless once islands in the sea. Every available square yard of ground is under cultivation, and villages occur literally every few hundred yards. Waterways are very numerous, and extend like a network over the whole face of the land. In the western section, on the other hand, the country is rolling and broken with comparatively few waterways. The villages, especially near Nanking, are scattered, and the population is scanty by comparison with that of the eastern section.

Generally speaking the western section is much more favourable for movement across country than the eastern, but the roads are not passable for wheeled traffic without considerable work, and its movement across country would be difficult. In the delta country there are practically no roads,

and to such an extent is the country intersected by waterways, that, although numerous paths follow the boundaries of the fields, these paths necessarily zigzag and take unexpected turns in order to reach convenient crossing-places over the creeks.

Shanghai to Soochow.—On leaving Shanghai station the line runs at first in a SW. direction through a rapidly growing suburb. A curve to the W. soon follows, and the line leaves the suburb and enters the delta country proper. This is entirely flat and everywhere cultivated and studded with numerous villages. Clumps of trees and groves of bamboo are interspersed with buildings and restrict the view. Innumerable graves form a characteristic feature of this country, being scattered everywhere in the form of mounds from 3 to 10 ft. high. At mile 10 the large village of Nansiang is passed. There is no other important place until we reach Kunshan (mile 32). The walled city lies to the north of the line and partly encloses an isolated hill (see *Gazetteer*). Up to this point the railway runs almost parallel to the N. bank of the Soochow Creek. About 5 miles W. of Kunshan station it crosses the Kunshan–Soochow branch of the Grand Canal, and continues through low-lying country liable to floods, and bordered on the S. side by the canal and on the N. by the Yang-ch'êng Hu, a shallow lake. Drier ground is entered upon as Soochow is approached. The railway runs parallel to the N. wall of the city for nearly 2 miles and reaches the station at mile 53.

Communications are entirely by water, and this region is generally impassable to troops except by water or railway line. Infantry and cavalry could move with great difficulty, but the country is quite impassable to wheeled traffic.

Soochow to Chinkiang.—Shortly after leaving Soochow the line makes a bend to the NW., and then runs parallel to, and mostly within a mile of, the Grand Canal all the way to Tanyang (mile 132). In the immediate neighbourhood of Soochow the country is low and swampy, but it then becomes undulating and broken, though still much intersected by creeks. Mulberry-trees grow in very large numbers, and these

give the country a well-wooded appearance. Wusih, which is reached at mile 80, is a small walled city, and is the chief centre of the silk industry (see *Gazetteer*). The waterway leading from Wusih to Kiangyin (see Route 14) is crossed at mile 83. The country for the first 5 miles after leaving Wusih is flat and swampy. It then rises slightly, and though flat is dry and more passable.

From Soochow onward the towpath along the Grand Canal is passable for infantry and cavalry (see Route 1A, sections 2–4). At first it is occasionally broken by unbridged creeks. Beyond Wusih creeks are much fewer and the towpath uninterrupted. Cavalry and infantry could move with some freedom in this country, but roads are impassable to wheeled traffic.

At Tanyang the country becomes more high, dry, rolling, and broken. Much of it is uncultivated grass down-land. It is sparsely wooded, and creeks are very few. Just beyond Sinfeng Ku station, at mile 137·4, the railway crosses the Grand Canal at the northern extremity of a lagoon known as the Tanyang Hu (or Lien Hu), which is as much as 10 ft. deep in summer and nearly dry in winter. The line curves W. through rising country until it reaches a ridge or watershed at mile 144. From this ridge it descends by easy gradients to Chinkiang City through undulating country necessitating heavy cuttings and a tunnel through the Fort Hill, entered at mile 149·4.

Chinkiang to Nanking.—From Chinkiang the line continues in a westerly direction, following the right bank of the Yangtse at a distance of from 1 to 5 miles. The country is hilly. Up to mile 175 the route followed by the line lies along the foot of the hills to the S., the country to the N., between the railway and the river, being mostly low-lying and swampy, and impassable except by raised footpaths. After mile 175 the country is more broken. It is well wooded in the hills, and there is much uncultivated grass-land ; creeks are very few. The summit of the railway is reached at mile 186, the rail-level being 91·28 ft. above the I.M.C. low-water mark at Shanghai. At mile 190 the line comes within sight of the wall of Nanking. It skirts the N. wall and reaches the terminus

at mile 193, which is situated at the eastern end of the suburb known as Hsia-kuan. Close to the terminus is the Hsia-kuan station of the Nanking City Railway.

The country generally is passable for all arms, though it would be difficult for wheeled traffic on account of the absence of suitable roads. The road from Chinkiang to Nanking is never far from the railway. It is passable for cavalry and infantry and would be available for a force marching alongside the railway. (For further details see Route 17 A.)

Branch Lines

The Shanghai–Woosung and the Nanking City railways, which may be looked upon as branches of the Shanghai–Nanking line, are dealt with below. In addition, there is a short line at Chinkiang connecting the main station with the Chinkiang Bund station on the banks of the Yangtse River.

Connexions with other Railways

With the completion of the Shanghai Loop Line (see below) direct communication between the Shanghai–Nanking and the Shanghai–Hangchow lines has been established.

At Nanking the line has two termini: one on the bank of the Yangtse, at Chiang-pien (Kiang-pien), where a railway ferry conveys passengers to the southern terminus of the Tientsin–Pukow railway, and another, ½ mile to the S., near Hsia–kuan station on the Nanking City Line.

Finally, the new Nanking–Hunan railway will be connected with the Shanghai–Nanking line outside the NE. corner of the city.

II. Shanghai–Woosung (or Sung–Hu) Railway

The history of the railway has been outlined above (see p. 98). In 1898 the line was reconstructed with the aid of Chinese capital. It was subsequently amalgamated with the Shanghai–Nanking line under the terms of the agreement of July 9, 1903.

The line is 10·2 miles in length and connects the Shanghai

terminus of the Shanghai–Nanking railway, outside the N. limit of the International Concession, with Woosung, the port for ocean-going steamers.

As the country is intersected by creeks many bridges had to be constructed; the most important have been described in Route 8 A. There are no tunnels.

At Woosung the railway possesses a large water frontage and a jetty equipped with shear legs and crane for landing heavy materials.

List of Stations

Railway name.	*Post Office (or Wade) spelling if different.*
Shanghai, North.	
Changwan	Kiangwan.
Changwhapang	(Chang-hua-pêng).
Woosung Creek.	
Woosung Forts.	

Country bordering the Railway

A full description of the country through which the railway passes will be found in Route 8.

III. Shanghai Loop Line

When the Shanghai–Nanking and the Shanghai–Hangchow railways passed under the same management a scheme was elaborated in 1914 to connect the two termini at Shanghai by a loop line. This has now been carried into effect.

The new line, 10¼ miles long, leaves the Shanghai–Nanking line about 2 miles W. of Shanghai North Station, runs S., crossing Woodlands Creek near Ferry Road, the Soochow Creek near St. John's University and Jessfield Park, Fahwa Creek, Sikawei Creek, and Lunghwa Creek, and joins the Shanghai–Hangchow line at Lunghwa Junction.

The chief bridges span the Soochow Creek (145 ft.) and the Sikawei Creek (65 ft.). All bridges are built to accommodate a double track. An important station has been opened at Jessfield, and another at Sikawei.

IV. Nanking City Line (or Kiang-Ning Railway)

Whilst the Shanghai–Nanking railway was under construction a line was built to connect the terminus of the main line with the heart of the city. The funds were provided by the Provincial Government and the work was supervised by a British engineer. It was opened in August, 1908. Owing to bad management it has failed so far to yield a profit.

The line, about 8 miles long, though of standard gauge, was not built for heavy traffic. If, as has been proposed, it were incorporated in the projected Nanking–Hunan line (see below, railway No. XIII) it would have to be entirely relaid.

The head of the railway is in Hsia-kuan, the port of Nanking, near the hulks of the Nanking–Pukow ferry.[1] From there the line runs E., crossing the Chin-huai Ho by a bridge. Turning SE. it passes near the terminus of the Shanghai–Nanking main line, and follows a portion of the N. wall of the city. It enters the latter through the Chin-ch'uan Mên (Chin-tswan Mên), an old gate E. of the Naval College and NE. of the British Consulate. The first stopping-place inside the city is San-p'ai-lou near the German and American Consulates. The line ends in the SE. corner of the city, the terminus being within the walls (see *Gazetteer*, Nanking). The journey takes about 25 minutes.

List of Stations

Railway or local Spelling.	*Wade Spelling.*
Kiang-kou	Chiang-k'ou.
Sia-kwan	Hsia-kuan.
San-pai-lou	San-p'ai-lou
Ting-ka	Ting-chia.
Wu-liang-an	
Tu-tu-fu.	
Chung-tsên-kai	Chung-chêng-chieh.

[1] It should be noted that passengers from the Tientsin–Pukow line, who are provided with through tickets for the Shanghai–Nanking Railway, are landed at Chiang-pien (Kiang-pien), the river station on the main line, which is nearly a mile further down the river.

V. Shanghai–Hangchow–Ningpo (or Hu–Hang–Yung) Railway

The British and Chinese Corporation secured in 1898 the concession for the construction of a railway from Soochow to Hangchow, with an extension to Ningpo if necessary. Some years, however, elapsed before the Corporation found itself in a position to commence work, and in the meanwhile two Chinese companies (the Kiangsu and the Chekiang railway companies) were organized for the construction and operation of a line between Shanghai and Hangchow. An Imperial Edict of 1905 placed the rights of construction in the hands of these two companies, and work was commenced. This action, being in contravention of the terms of their concession, called forth a remonstrance from the British company, and after some further discussion China agreed in 1908 to issue a loan of £1,500,000, through the British and Chinese Corporation, for the expenses of the construction of the railway. Supervision over the construction was to be exercised by British engineers and preference given to British goods. These conditions, however, were not carried out, and the Ministry of Communications virtually surrendered the construction and control of the line into the hands of the two provincial companies. Actual work began in 1906, and the line from Shanghai to Hangchow was opened in August 1909. Some construction was also started from the Ningpo end of the Hangchow–Ningpo section. The companies got into financial difficulties, and in October, 1914, the railway, together with rolling-stock and equipment, was taken over by the Chinese Government and brought under the same management as the Shanghai–Nanking Railway. The 1908 agreement has at last been carried out, and the line is now administered under an engineer-in-chief, a traffic manager, and a chief accountant, all three of British nationality.

With regard to the Hangchow–Ningpo extension 53 miles have been completed, and the whole section from Ningpo to Shaohingfu will be available for traffic very shortly. But the last section (some 45 miles) is being delayed owing to the difficulties of bridging the Ch'ien-t'ang river near Hangchow.

General Description

The length of the whole line, when completed, will be about 220–30 miles, of which only some 38 miles are in Kiangsu, the rest being in the Province of Chekiang.

Track.—The line is single throughout and is of the standard 4 ft. 8½ in. gauge. 75- to 80-lb. rails in lengths of 9 metres have been used; these rails were rolled at Hanyang iron works. The sleepers are of Japanese hardwood of very poor quality, and require constant renewing. No chairs are used, the rails being spiked to the sleepers by means of iron dog-spikes 4 in. in length (13 sleepers have been laid down to every 30 ft.). The line is insufficiently ballasted in places. The ballast is of limestone to an average depth of 15 or 16 in.

Curves and gradients.—The country traversed by the line is entirely flat. The ruling gradient used in approaches to bridges is 1 in 300. The sharpest curve is one of 1,320 ft. radius.

Bridges.—The bridges are very numerous; thus, apart from culverts, there are no less than 48 between Shanghai and Fengking, a distance of 38 miles. They comprise a great variety of types, and have been the subject of much discussion, especially the two which span the branches of the Huang-p'u river at miles 27·35 and 29·89, these being the largest and most important on the whole line. The first of these bridges measures 440 ft. in length and is 32 ft. above water-level. Its construction was most difficult, on account of the rapid current of the stream, with a depth there of 40 ft. The other bridge is 400 ft. long. Both consist of two through spans of 200 ft. each; in the opinion of some experts they have been badly built and are weak points on the line. Other important bridges on the Shanghai–Hangchow section are as follows:

At mile	1·56	. . .	one span of 60 ft.
,,	23·62	. . .	,, ,, 62 ft.
,,	25·23	. . .	,, ,, 102 ft.
,,	31·8	. . .	two spans of 100 ft.
,,	68	. . .	one span of 60 ft.

On the Hangchow–Ningpo section bridgework is also very heavy, the chief bridges being at Pokwan over the Ts'ao-o (almost completed in 1914, but construction delayed through the war) and a bridge across the Ch'ien-t'ang river. The position of the latter has not yet been definitely settled upon. According to the original survey it was to cross from Cha-k'ou. In order to reduce the length of the bridge it is now proposed to cross the river at Fuyanghsien, but the shifting bottom of the river presents here too a well-nigh insuperable obstacle.

There are no tunnels on this line.

Rolling-stock.—The total amount of rolling-stock available for use on the line in December, 1915, can be classified as follows :

Locomotives :

	Type.	*Number.*
Passenger	4—4—0	12
Goods	2—6—0	10
,,	2—8—0	2
Shunting	0—8—0	1
,,	0—6—0	11
	Total	36

Carriages :

	Number.	*Total carrying capacity.*
First-class cars, ordinary	9	310 men.
Second-class cars, ordinary	11	598
Third-class cars, ordinary	60	4,431
Coolie-class cars	10	1,064
Composite :		
First- and second-class diners	4	188
,, ,, ordinary	4	256
Kitchen cars	2	
Brake and baggage vans	9	
Postal vans	2	
Heating and lighting cars	2	
Totals	113	6,847

Goods wagons :

	Number.	*Total carrying capacity.*
Covered . . .	231	6,750 tons.
Open	267	7,750
Adapted for special purposes	28	520
Totals . .	526	15,020

Speed.—Trains cover the distance from Shanghai to Hangchow in about 5 hours including stops, as compared with 24 hours by steam-launch.

Workshops.—For minor engine repairs and overhauling there are shops at Kung-ch'ên-ch'iao (Kon-zen-chiao), which is on a short branch line running from Hangchow to the Foreign Settlement on the Grand Canal, but all major work is now done in the Shanghai-Nanking shops at Woosung.

List of Stations (as far as Hangchow)

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*	*Province.*
0	Shanghai, South	Shanghai	Kiangsu
	Kao-chang-miao	(Kiangnan)	,,
3·25	Lung-hwa	Lunghwa	,,
7·00	Mei-kai-lung	(Mei-chia-lung)	,,
10·00	Hsin-chwang	Sinchwang Ku	,,
14·75	Hsin-chiao	(Hsin-ch'iao)	,,
20·25	Ming-hsin-chiao	(Ming-hsing-ch'iao)	,,
22·00	Sung-kiang	Sungkiangfu	,,
28·75	Shih-hu-tang	(Shih-hu-tang)	,,
38·00	Fung-chin	Fengking	,,
44·25	Ka-shai	Kashan	Chekiang
56·00	Ka-shing	Kashing	,,
66·25	Wang-tien	Wangtien	,,
72·75	Yeh-zah	Siashih	,,
81·00	Hsia-chiao	(Siehkiao)	,,
85·00	Chow-wang-miao	Chowwangmiao	,,
88·75	Chang-an	Changan	,,
94·25	Shü-chung	Sütsun Che	,,

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*	*Province.*
98·25	Lin-ping	Linping	Chekiang
106·25	Shien-chiao	Kienkiao	,,
110·50	Ken-shang-mun	(Kên-shan Mên)	,,
113·00	Hangchow	Hangchow	,,
115·00	Nan-shin-chiao	(Nan-hsing-ch'iao)	,,
117·00	Zah-kou	(Cha-k'ou)	,,

Country bordering the Railway

The station at Shanghai is S. of the Chinese city, near the Lao-chia-pang quarter. The line runs SW., passing N. of the Chiang-nan Arsenal. At Kiangnan sidings branch off to the high-level wharves on the Huang-p'u river.

Between Shanghai and Hangchow the railway traverses a uniformly flat country, well cultivated, but much intersected by creeks. There are practically no roads, though in most cases towing-paths will be found along one or both banks of creeks. As far as Kashing the railway runs to the N. of the main launch route, and generally at no great distance from it (see Route 3). Beyond Kashing the railway turns S. away from the Grand Canal. By doing so it avoids the competition of water-borne traffic; on the other hand it passes through no important cities. It reaches the NE. corner of Hangchow near Kên-shan Gate, follows the E. wall of the city, and ends a few miles beyond at Cha-k'ou (Zah-kou) on the Ch'ien-t'ang river.

Branch Lines

(A) **Kung-ch'ên-ch'iao** (Kon-zen-chiao) branch connects the Foreign Settlement on the banks of the Grand Canal, to the N. of Hangchow, with the Shanghai–Hangchow main line, the junction taking place at Kên-shan Mên station. The line was built by local enterprise and completed in 1907.

The distance from Kung-ch'ên-ch'iao to Kên-shan Mên is only 4·6 miles. The line is single and of standard gauge.

(B) **Kashan–Chapu** branch was projected in 1909, but has not yet been constructed.

Connexions with other Railways

The Shanghai terminus is now connected with the Shanghai–Nangking Railway by means of a loop line (see above).

Various schemes have been floated by provincial companies to link up Hangchow with some of the more important cities of the province of Anhwei. A line from Wuhu to Hangchow was started in 1906, but only a small section from the Wuhu terminus was completed. The project to build a line from Hweichow to Hangchow has recently (1916) been revived. Far more important, however, is the proposal to link up the Nanking–Hunan system with Hangchow or Kashing. The results would be far-reaching for Hangchow, which would thereby grow into an important railway junction.

VI. Tientsin–Pukow (or Ching-P'u) Railway

This railway constitutes a continuation of the Shanghai–Nanking line and, together with the latter, affords the best inland communication between South and North Kiangsu, notwithstanding the fact that it lies chiefly in the province of Anhwei and only crosses Kiangsu at two points. The southern section of the railway runs almost exactly parallel to the sea-coast and to the Grand Canal, the latter occupying a half-way position between the other two.

The first scheme to connect Tientsin with the Yangtse River dates back to 1897, but it fell through mainly as a result of the German occupation of Kiaochow. Soon after negotiations were renewed, and in 1899 a provisional agreement was signed by which the concession was shared by Great Britain and Germany. The southern terminus of the line was to be located at Kwachow, opposite Chinkiang. In the final agreement (1908) a new alinement was secured, and the southern terminus altered to Pukow Ku opposite Nanking. The northern section as far as the border of Kiangsu was constructed under German direction (approximately two-thirds of the total length), and the southern section under British direction. After the completion of the bridge across the

Yellow River the whole line was opened (December, 1912) and through trains were run between Tientsin and Pukow Ku. In accordance with the terms of the agreement the line was handed over to Chinese management, and has not been maintained in a very efficient condition. Traffic is increasing very satisfactorily in spite of harassing exactions by likin officials, and the line is now paying its way.

General Description

Total length 628·38 miles (of which only 61½ are in Kiangsu).

Track.—The line is of the standard (4 ft. 8½ in.) gauge and is single throughout, except from the workshops at Pukow Ku to the wharf, where it is double. The rail used in the northern section is a flat-bottomed rail in lengths of 10 metres, weighing between 76 and 90 lb. per yard. On bridges 15-metre rails are used. In the southern section an 85-lb. rail of British standard section, in lengths of 30 ft., has been used. The rails are laid directly on the sleepers, the latter being of Japanese hardwood and pine. Broken bricks were used as ballast between Tientsin and Tsinan. The track has been very well laid. In the section north of the Yellow River traffic is occasionally stopped by floods.

Curves and gradients.—In the northern section the sharpest curve is one of 1,968 ft. (600 metres) radius, and the steepest grade is 1 in 150. In the southern section there are no curves of less than 2,000 ft. radius, while the ruling gradient is 1 in 150 south of Pengpu (mile 108) and 1 in 200 north of it.

Bridges.—The country traversed by the line has called for a very considerable amount of bridging. In the southern section there are no less than 299 bridges in 236 miles, an average of 74 linear ft. per mile. In the northern section the bridge work is even heavier. The most important of all is the bridge over the Huang Ho or Yellow River. It is one of the longest in China, and consists of nine 91·5-metre (300-ft.) 'subdivided-panel Warren trusses' and three cantilever spans (over the

main channel), made up of two anchor-arm spans of 128·1 metres (420 ft.) and a central span of 164·7 metres (540 ft.). Rail-level is 50 ft. above low water, while total length of bridge is 1,255·2 metres (4,116 ft.). The contractors were the bridge-building establishment of the Augsburg-Nürnberg Machine Company.

Next in importance comes the bridge over the Huai Ho (mile 108·5 from Pukow). It consists of nine through spans of 200 ft. each, 1,876 ft. between abutments, supported on 8 piers each 9½ ft. thick, and varying in height from 55 to 110 ft., constructed of reinforced concrete, with granite caps. Rail-level is 45 ft. above low water. Just north of this a shallow lake is crossed by a plate-girder bridge, 62 spans of 30 ft. each. At mile 135·5 the line crosses the Kuei Ho over a fine bridge of 22 spans, one being a through span of 200 ft. and the others deck spans of 30 ft. each. North of Süchowfu there are two bridges of interest. One, at mile 216, consists of 10 spans of 30 ft. each and one of 100 ft. The other, at mile 219, has 20 spans of 30 ft. each. Both bridges are built of stone. An important bridge crosses the Grand Canal just south of Hanchwang (mile 238). In Shantung the bridge work is very heavy, but builders had the advantage of securing solid foundations and of procuring splendid stone (both granite and limestone) close at hand. Between Lincheng Sung (mile 254) and Kiehho (mile 284·5), a distance less than 31 miles, the track passes over no less than 9 considerable streams involving big bridges

There are no tunnels on this line

Rolling-stock.—The line was originally worked in two sections: the northern or German section extending from Tientsin to Likwoyi, and the southern or British section from Likwoyi to Pukow Ku. For the former no returns of the rolling-stock were available; for the latter the following return was made on June 30, 1914:

A. Locomotives :

2	2-6-2 shunting tank-engines.
4	2-6-0 ,, tender-engines.
14	2-6-0 mixed traffic tender-engines.
12	4-6-0 passenger tender-engines.
Total 32	

B. Passenger cars :

2	private cars.
3	first-class cars.
3	first-class sleeping cars.
4	first-class dining cars.
4	first- and second-class composite cars
5	second-class cars.
23	third-class cars.
4	third-class and brake-van composite cars.
4	baggage cars.
6	inspection cars.
8	30-ft. brake vans.
Total 66	

C. Goods wagons :

160	ballast wagons	30 tons capacity
100	high-sided goods wagons	30 ,, ,,
30	covered goods wagons	30 ,, ,,
180	,, ,,	20 ,, ,,
39	,, ,,	15 ,, ,,
20	flat wagons	30 ,, ,,
Total 529		

D. Mud wagons :

98 mud wagons for construction purposes.

Speed.—Excluding a few mixed trains, running on short sections only, there was in April, 1916, one mail train in each direction daily. Leaving Tientsin at 12.40 p.m., it reached Süchowfu on the following morning at 9.3, and Pukow Ku

at 6.23 p.m., after a journey of 29 hours 43 minutes. From the Pukow Ku terminus the train left at 9.45 in the morning, reached Süchowfu at 7.15 p.m., and Tientsin on the following day at 3.2 p.m., the total distance being covered in 29 hours 17 minutes. In addition to the above, two express trains, one in each direction, travelled once a week between Tientsin and Pukow Ku, covering the whole distance just under 25½ hours, including stops.

Workshops.—The workshops for the southern section of the line are situated at P'u-chên near the Pukow Ku terminus, inside the old city walls. Those for the northern section were (1912) temporarily at Tsinan. Both are amply equipped with modern machinery There are also some railway works at Süchowfu.

List of stations.—The following list includes all stations between Pukow Ku and Tsinan. The mileage is reckoned from Pukow Ku. The spelling given is that in use on the railway. Transliteration according to Post Office, or, failing that, Wade's system is given throughout.

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*	*Province.*
0	*Pukow Wharf	Pukow Ku	Kiangsu
2½	*Pukow City or Puchen	(P'u-chên)	,,
7½	Huachiying	(Hua-chi-ying)	,,
14½	Tungko	(Tung-ko)	,,
20½	Wu I	Wuyi An	Anhwei
30¾	Chuchow	Chuchow An	,,
39	Shahochi	Shahotsi	,,
45¼	Changpaling	Changpalin	,,
53	Sanchieh	Sankieh	,,
60¼	Kuantien	Kwantien An	,,
70¾	Mingkuang	Mingkwang	,,
81¼	Hsiaohsiho	Siaokiho	,,
93½	Linhuaikuan	Linhwaikwan	,,
99¼	Mentaitze	(Mên-tai-tzŭ)	,,
108½	*Pengpu	Pengpu	,,
117½	Tsaolaochi	(Tsao-lao-chi)	,,

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*	*Province.*
126¼	Hsinchiao	(Hsin-ch'iao)	Anhwei
135¼	Kuchen	Kuchen An	,,
144¾	Jenchiao	(Jên-ch'iao)	,,
154½	Hsishihpo	(Hsi-shih-p'u)	,,
164½	Nanhsuchow	Suchow An	,,
173¼	Fulichi	Fulitsi	,,
183½	Chiakou	(Chia-kou)	,,
192	Tsaotsun	(Tsao-ts'un)	,,
201½	Sanpu	(San-p'u)	Kiangsu
211	*Hsuchowfu	Süchowfu	,,
218½	Maotsun	(Mao-ts'un)	,,
224¼	Liuchuan	(Liu-chuang)	,,
233¼	Likuoyi	Likwoyi	,,
238½	Hanchuang	Hanchwang	Shantung
247¾	Shakou	Shakow Sung	,,
254	*Lincheng	Lincheng Sung	,,
263½	Kwanchiao	Kwankiao Sung	,,
270	Nanshaho	(Nan-sha-ho)	,,
276½	Tenghsien	Tenghsien	,,
284½	Chiehho	Kiehho	,,
294	Lianghsiatien	(Liang-hsia-tien)	,,
300½	Tsowhsien	Tsowhsien	,,
313	*Yenchowfu	Yenchowfu	,,
323¼	Chufou	Küfow	,,
329¾	Wutsun	Wutsun	,,
340½	Nan I	Nanyi	,,
347½	Tawenkou	Tawenkow	,,
357	Tungpaipu	(Tung-pei-tzŭ-p'u)	,,
365½	*Taianfu	Taianfu	,,
373¾	Chiehshu	Kiehshow Sung	,,
381	Wanteh	Wanteh	,,
389	Changhsa	Changsia	,,
393½	Kushan	Kushan Sung	,,
401¾	Tangchiachuang	(Tang-chia-chuang)	,,
410½	*Tsinanfu	Tsinan	,,

* Stations with watering, engine-changing, and siding accommodation.

Country bordering the Railway

Starting from the river-side, where a wharf has been built, the railway runs for 2½ miles through low ground which is periodically invaded by the Yangtse River, and across which an embankment, averaging 12 ft. in height, had to be constructed. This portion of the railway has a double line, a special line of rails being laid down to connect the workshops with the terminus.

At mile 2½ the railway enters the old city of Pukow Ku, passing through a gap in the city wall, and immediately inside are the workshops. This station is known as P'u-chên or Pukow City station. Beyond it the railway passes out of the city again, making its exit through a cutting some 90 ft. deep and about 1,000 ft. long, through a gap in hills which run nearly parallel to the course of the Yangtse. Up to mile 6 there is a succession of heavy cuttings and embankments, most of the former having rock in them. From mile 6 to mile 9 the work was comparatively easy, though the latter portion is on a high embankment. Beyond this point, for 4 miles, some low ground had to be crossed, which is below the level of the adjacent rivers, and consequently rarely dry. The rivers are excluded by high flood-banks which occasionally burst in flood-time, and to ensure the safety of the railway it has been necessary to support it on an embankment averaging 20 ft. high. Great difficulty was experienced in raising the embankment, as no solid foundation was found. From mile 13 to mile 39 the country is fairly level and well cultivated, although less fertile than the plains north of the Huai River (chief agricultural products sesame, Indian corn, pea-nuts, rice). As the plain is liable to floods, embankments and minor cuttings alternate with bridges.

The line leaves the province of Kiangsu south of Wuyi An, at mile 17¼, and does not re-enter it until about mile 193, the intermediate section lying in the province of Anhwei.

Beyond mile 39 the line enters a range of low hills which

form the watershed between the Yangtse and the Huai River. Through these a practicable route has been found, by going some miles to the E. of the main road (see Route 37). There is a steady rise, culminating three miles N. of Changpalin, at mile 48¼, which constitutes the highest point on the line S. of the Huai River (344 ft. above railway datum). The construction of this section was very difficult. Rock cuttings up to 40 ft. in depth alternate with high embankments, with numerous bridges and culverts, while the railway winds about in the most tortuous manner, in order to obtain the gradient of 1 in 150 which was fixed as the maximum.

The descent to the Huai valley is gradual, but involves passing through deep cuttings at several places and crossing the Chi Ho at Mingkwang (mile 70¾). The river drains a very large area, and in time of heavy rain its lower courses become long narrow lakes. The line now enters a very flat but not particularly productive country. After passing between two considerable but very shallow lakes, it reaches Pengpu, a farming village which, thanks to the railway, has grown into an important town on the banks of the Huai. (It is only 40 ft. above the level of Pukow Ku.) The bridge which spans the river at this point has been described above. On the northern bank of the Huai River the railway crosses a shallow lake and enters an immense plain, well cultivated and very fertile. It is specially famed for its water-melons (ripe at the end of July), but produces also kaoliang, millet, pea-nuts, wheat, cotton, and hemp. The chief localities touched by the railway are Kuchen An (mile 135), with a prosperous junk traffic, and Suchow An (mile 165), a large walled town. Here the first stone bridge is found, the line having entered a stone country. From Kuchen An there is a steady rise to mile 227, just beyond Liu-chuang, where the road-bed is 397 ft. above railway datum. Beyond mile 193 the line lies again in the province of Kiangsu and passes the flourishing city of Süchowfu. Before reaching the station the railway traverses the old bed of the Yellow River, and continues north through rocky and fairly wooded country. At Liu-

chuang it meets the ancient paved main road to Peking. Below Hanchwang (mile 237) it passes into the province of Shantung and crosses the Grand Canal by an important bridge. Thence to Yenchowfu the line lies through a flat piece of country largely drained by the Grand Canal. From Yenchowfu there is a steady up gradient to a point 2½ miles south of Nanyi, where the line crosses the watershed between the Yangtse and the Yellow Rivers (410 ft. above sea-level).

From Nanyi the railway seeks the higher land along the foot of the Shantung Mountains. By following this course the danger from the Grand Canal floods is obviated on this section; but the nature of the country has involved heavy bridge and culvert work. The streams over which the bridges in this district are built have very wide beds, and during heavy rains they carry down an enormous volume of water, necessitating more solid bridge work than would be necessary under ordinary conditions. From Tawenkow (mile 347) the line rises steadily to Taianfu, near the sacred mountain of T'ai Shan, and the rise is continued to Kiehshow Sung, the highest point on the line, after which there is a drop to Tsinan, the capital of Shantung.

Branch Lines

(A) From **Lincheng Sung** (in province of Shantung, mile 254 from Pukow Ku) to **Tsaochwang,** to serve coal mines in the Yihsien district. The line is 19 miles long and was opened May, 1912.

(B) From **Yenchowfu** (in Shantung, mile 313 from Pukow Ku) to **Tsining,** an important town on the Grand Canal (see Route 19 II). The line is nearly 20 miles long and was opened to traffic November, 1912.

(C) From **Lokow** (in Shantung, mile 414¾ from Pukow Ku) to **Huang-t'ai-ch'iao,** a port on the Yellow River. Constructed originally as a narrow-gauge salt line, it was widened to standard gauge in 1913. Length 5½ miles.

Connexions with other Railways

At the Pukow Ku terminus the railway company run frequent steam-ferries across the Yangtse River (time of crossing about 5 minutes) to convey passengers to and from the Nanking terminus of the Shanghai–Nanking Railway (see railway No. I). This service is bound to increase further when the projected line from Nanking to Changsha is completed (see railway No. XIII). On the north side of the Yangtse the construction of the Pukow–Sinyangchow line (see railway No. IX) will tap the trade of the province of Anhwei and link up Pukow Ku with the Peking–Hankow line.

At Süchowfu the line meets the Kaifeng–Süchowfu trunk (see railway No. VII) and secures a connexion with the Peking–Hankow Railway. A line to Ichowfu and Tsingtau is also projected (see railway No. XVIII).

At Tsinan it links up with the Shantung system.

(*Note.*—The line from Tsinan to Tsingtau was opened in 1904. Other lines, including Tsinan–Shuntehfu, Kaomi–Ichowfu–Hanchwang, Chefoo–Weihsien, &c., are projected.)

Finally, at Tientsin the line joins the important Peking–Tientsin–Moukden Railway, through which direct communication by rail with Europe is secured.

VII. Kaifeng–Süchowfu Railway

The Kaifeng–Süchowfu Railway is a section of a great trunk line, usually referred to as the Lung–Hai (Lung–Ts'in–Yü–Hai) or the Hai-Lan (Lanchow-to-the-Sea) Railway, which will run at right angles to the Peking–Hankow and Tientsin–Pukow lines and extend railway facilities to the provinces of Shensi and Kansu. It is even contemplated to continue the line some 1,900 miles W. of Lanchowfu, in order to link it up with the Russian Central Asian and Trans-Siberian systems. A preliminary agreement with a Belgian syndicate (Compagnie Générale de Chemins de fer et Tramways en Chine, of Brussels) for a loan of £10,000,000 was signed in October, 1912.

It was understood that both France and Russia were lending financial support to the enterprise.

Local companies had previously started work on certain sections, e.g. the Kiangsu Railway Company (Su-Lu Kung-ssŭ) on the Süchowfu–Tsingkiangpu section (see below), the Hsi-T'ung Company on the Tungkwanting–Honanfu section; whilst a Belgian syndicate had actually completed and opened to traffic in 1909 the Kaifeng–Honanfu section, previously known as the Pien-Lo Railway. All these lines have been bought up and merged in the larger scheme.

The outbreak of the European war and the subsequent withdrawal of many of the Belgian engineers, and what was more serious still, of foreign capital, considerably hampered progress of construction without, however, bringing it to a standstill. The work was continued by Chinese engineers and some money was obtained locally. A successful loan of $7,000,000, raised at the end of 1915, momentarily relieved the company of financial anxiety. At the present time (1916) the line has been completed from Süchowfu in the E. to Kuan-yin-t'ang (beyond Mienchih) in the W. The line is under construction as far as Tungkwanting, but progress is slow on account of great engineering difficulties which have to be overcome.

A problem that has caused considerable discussion is the sea terminus of the railway. It was originally intended to extend the line from Süchowfu, where it connects with the Tientsin–Pukow railway, to Haichow. The scheme, however, is unlikely to be carried out. The cost of making a harbour at or near Haichow would be quite prohibitive without the prospect of any corresponding results in the shape of trade, especially owing to the competition of Tsingtau, with which port Süchowfu is likely to be directly connected in the near future (see railway No. XVIII). It has therefore been suggested to establish the terminus at some port on the Yangtse, at Tungchow or at Haimenting, but although ample and good anchorage is available at both places there are insuperable objections to them as riverine towns inasmuch as the convex

parts of the bank are continually being cut away. The river is in a state of flux and no one can tell what may happen. Moreover such a line, if constructed, would provide rail communication in competition with the southern or British section of the Tientsin–Pukow Railway. In view of these difficulties it is not unlikely that Süchowfu may remain the eastern terminus of the Lung-Hai Railway.

Track.—The Kaifeng–Süchowfu section was completed in June, 1915. It consists of a single track of standard gauge, 175 miles in length.

Rolling-stock.—The rolling-stock was acquired partly in Belgium (?) and partly at Pukow Ku. No detailed returns are available, but it is believed that recently the Pukow Ku works supplied the company with 3 or 4 heavy shunting-locomotives, 50 40-ton low-sided ballast wagons with sides so attached that they could be easily removed if wagons were used as ' flats ', and 50 40-ton covered goods wagons.

VIII. Tsaochwang–Taierhchwang Railway

This railway is the property of Tsaochwang Coal Mines near Yihsien, and was originally built (opened 1910) to convey the coal to the Grand Canal. The line lies entirely within the province of Shantung, but Taierhchwang, the Grand Canal terminus, is close to the border of Kiangsu.

The track is single and of standard gauge, 26 miles in length. Rolling-stock, stations, &c.—No details available.

At Tsaochwang the line connects with a small branch (Lincheng Sung–Tsaochwang) of the Tientsin–Pukow Railway. Railway trucks can pass from one line to the other and reach the main line at Lincheng Sung, but passengers have to change at Tsaochwang.

The construction of the Kaomi–Hanchwang line will place Tsaochwang in direct railway communication with the port of Tsingtau.

(B) RAILWAYS UNDER CONSTRUCTION

IX. Pukow–Sinyangchow (or Pu–Hsin) Railway

The object of the line is to link up the Tientsin–Pukow with the Peking–Hankow and thus ultimately provide railway connexion between Shanghai and Szechwan. It leaves the Tientsin–Pukow line at Wuyi An near the border of Kiangsu (about 20 miles N. of Pukow Ku), and will connect with the Peking–Hankow about 3 miles SE. of Sinyangchow. The railway lies entirely within the provinces of Anhwei and Honan.

A final agreement for a loan to provide capital for the construction of this line was signed on November 4, 1913, between the Chinese Government and the Chinese Central Railways Ltd. It superseded an earlier agreement dated January 6, 1899. The loan is for £3,000,000 at 5 % and for a term of 40 years.

The following are the chief conditions : the loan is secured by a mortgage on the railway. The period of construction is estimated at three years from commencement of work, which should be within six months. Construction and control to be vested entirely in the Chinese Government, who will appoint the director-general. The engineer-in-chief will be a British engineer chosen by the director-general, with the consent of the company, and a British chief accountant will be responsible for the disbursement of loan funds. (After completion of the railway, the British engineer-in-chief and the British chief-accountant will be succeeded by a British maintenance-engineer and a British traffic-manager.)

The survey was completed in 1914, and the construction of the track was commenced, but on the outbreak of the European War work had to be suspended for lack of funds. An attempt to float a loan of Tls.12,000,000 in Shanghai proved abortive.

The estimated length of the line is 285·6 miles. Work was begun from Wuyi An, and the embankments have

been completed for about 9 miles. 85-lb. rails will be used.

Curves and gradients.—The line passes through rolling country and few sections will be comparatively level. The highest point is reached at Sinyangchow, 366 ft. above the datum of the Tientsin Pukow Railway. The lowest point is 10 miles W. of Wuyi An. Difference between highest and lowest point is 224 ft. The ruling gradient is 1 in 200; the sharpest curves have a radius of 3,000 ft.

Bridges.—The bridge-work on this line will be considerable. A large bridge will be constructed across the Pi Ho near Liuanchow (mile 123); other large bridges will chiefly be required on the western section of the line, beyond mile 178; but high bridges of a 100-ft. span will, however, be constructed at various points throughout the whole length of the railway. It is estimated that there will be about:

10,000	linear ft.	of bridge-work	of 20	ft.	span and under
2,500	,,	,,	30	,,	,,
3,000	,,	,,	60	,,	,,
6,000	,,	,,	100	,,	,,

There will be no tunnels.

List of (proposed) stations

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*	*Province.*
0	Wu-i	Wuyi An	Anhwei
6¼	Chieh-shou	(Chieh-shou)	,,
13½	Chüan-chiao-hsien	Chüantsiao	,,
23½	Hsiao-chi-tzŭ	Siaotsi An	,,
34	Ta-shu-chieh	Tashukai	,,
42¼	Lan-kan-chi	(Lan-kan-chi)	,,
49¼	Wên-chi	(Wên-chia-chi)	,,
54	Shih-tang-chiao	(Shih-t'ang-ch'iao)	,,
59¾	Chang-chia-miao	(Chang-chia-miao)	,,
64¼	Tien-pu	Tienfow	,,
70½	Er-shih-li-pu	(Êrh-shih-li-p'u)	,,

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*	*Province.*
76	Lü-chou-fu	Lüchowfu	Anhwei
83½	Ta-tu-shan	(Ta-tu-shan)	,,
88¼	Hsiao-tu-shan	(Hsiao-tu-shan)	,,
96¾	Ta-pai-tien-tzü	(Ta-pai-tien-tzŭ)	,,
101	Kuan-ting-chên	Kwanting An	,,
109	Chin-ch'iao	Kinkiao	,,
115	San-shih-li-pu	(San-shih-li-p'u)	,,
123	Liu-an-chou	Liuanchow	,,
132½	Hsü-chia-chi	(Hsü-chia-chi)	,,
137	Chin-shu-tien	(Chin-shu-tien)	,,
144¾	Hung-chia-chi	(Hung-chia-chi)	,,
150¼	Hsi-kao-tien	(Hsi-kao-tien)	,,
155	Wu-lung-miao	(Wu-lung-miao)	,,
160½	Lu-chia-tien	(Lu-chia-tien)	,,
164¼	Liu-chi	(Liu-chi)	Honan
170	Ching-hê-chi	(Ch'ing-ho-chi)	,,
175	Liu-shu-tien	(Liu-shu-tien)	,,
180½	Ku-shih-hsien	Kushihsien	,,
186¼	Yang-kuan-pu	(Yang-kuan-p'u)	,,
192	Hu-hsu-pu	(Hu-shu-p'u)	,,
199	Chun-hê-pu	(Ch'un-ho-p'u)	,,
205¾	Wang-tzü-kang	(Huang-ssŭ-kang)	,,
211¼	San-po-ssu	(San-p'o-ssŭ)	,,
218¾	Kuang-chou	Kwangchow	,,
229	Chai-hê	(Chai-ho)	,,
237	Sheng-tieh-pu	(Shêng-t'ieh-p'u)	,,
252¼	Lo-shan	Loshan	,,
262	Kao-chia-tien	(Kao-chia-tien)	,,
271	Wu-li-tien	Wulitien	,,
285½	Sin-yang-chou	Sinyangchow	,,

Branch Line

It is also contemplated to build a branch line from **Lüchowfu** to **Chengyangkwan** on the Huai River, approximate length 62 miles.

List of (proposed) Stations

Mileage.	*Railway spelling.*	*Post Office (or Wade) spelling.*
0	Lü-chou-fu	Lüchowfu
6	Kang-chi	(K'ang-chi)
13	Szŭ-shih-li-pu	(Ssŭ-shih-li-p'u)
19	Wu-shan-miao	Wushanmiao
25	San-yi-chi	(San-yi-chi)
32	Shuang-miao-chi	(Shuang-miao-chi)
39	Kai-huang-chi	(K'ai-wang-chi)
$45\frac{1}{4}$	Lao-miao-chi	(Lao-miao-chi)
$55\frac{3}{4}$	Kou-chi-yüan	(Ku-chi-yüan)
62	Cheng-yang-kuan	Chengyangkwan

X. Süchowfu–Tsingkiangpu Railway

A concession for the construction of a railway between Haichow, Tsingkiangpu, and Süchowfu was granted in 1908 to a provincial company, Su-Lu Kung-ssŭ (officially known as the Kai-Hsü-Ching-Hai Railway), but owing to financial embarrassment work had to be suspended before many miles of the track were completed.

In accordance with an agreement concluded in October, 1912, between the Chinese Government and a Belgian Syndicate, the local company was bought up and the line merged in the great railway scheme known as the Lung-Hai or Lanchow-to-the-Sea (see railway No. VII).

The estimated length of this line is 120 miles, out of which only $9\frac{1}{2}$ miles from the Tsingkiangpu end have been completed. This small section was opened in January 1912, but there was not enough traffic to pay expenses, and after two months' trial the train service was temporarily suspended until a further section of the line was finished.

The track is being built by Chinese engineers.

Bridges. The most important bridge on this section is across the Grand Canal to the W. of Tsingkiangpu. Construction has not yet begun. During the time the line was operated a steam-ferry conveyed passengers across the Canal.

List of Stations

Mileage.	
0	Tsingkiangpu.
4	Sipa.
9½	Yangchwang Ku.

Country bordering the Railway

The railway starts from the N. of Tsingkiangpu and for about 1 mile runs WNW., thence turning in northerly direction it crosses the old bed of the Yellow River beyond mile 2; a bridge spans the stream which runs in the middle of the sandy bed. Beyond the river-bed the line bends ENE. to Sipa, the salt dépôt on the Yen Ho (No. 1), which constitutes the terminus of a short branch line. The main line turns SW. and continues on the dry bed of the Yellow River as far as Yangchwang Ku, where it reaches the Grand Canal. A bridge will ultimately be constructed at this point and the line will run near the W. bank of the canal up to Sutsien; thence along the old bed of the Yellow River to Süchowfu.

(C) PROJECTED RAILWAYS

Numerous railway projects have been elaborated, but although in most cases concessions have been granted and preliminary surveys completed, it is unlikely that many will mature within the near future.

XI. Soochow–Changshu Ku Railway

This line will be constructed as a branch of the Shanghai–Nanking system as soon as funds are available.

Length about 16 miles. For description of the country through which the line would pass see Route 11.

XII. Wusih–Kiangyin Railway

A proposed branch of the Shanghai–Nanking Railway. Approximate length 25 miles. For description of country see Route 14.

XIII. Nanking–Hunan (or Ning–Hsiang) Railway

In 1906 the Anwhei Railway Company (a purely Chinese enterprise) began the construction of line from Wuhu to Hangchow via Ningkwofu. The work proceeded very slowly ; in 1911 the embankment and a few bridges had been completed between Wuhu and Wanchih, a section 24 miles in length.

In 1914 the whole concern was taken over by the Chinese Ministry of Communications and the provincial plans were merged in a larger scheme to connect Nanking with Changsha in Hunan, on the British section of the Canton–Hankow railway. An agreement for a loan for the construction of this railway was signed on March 31, 1914, by the Chinese Government and the British and Chinese Corporation. By the terms of this agreement the construction and control of the railway is vested entirely in the Chinese Government. A managing director is to be appointed by the Ministry of Communications. But the engineer-in-chief and traffic manager are to be British and to be appointed by the Ministry of Communications with the consent of the British and Chinese Corporation. The railway company is authorized to maintain a force of Chinese police with Chinese officers.

A preliminary survey was made in 1914, the approximate length of the main line being estimated at 643 miles. According to this survey the line would run through the following towns, starting from the Nanking terminus: Ningkwofu, Hweichow, and Wuyüan in the province of Anhwei ; Loping, Nanchang, Changshu Ki, and Pingsiang Ki in the province of Kiangsi ; thence along the existing colliery line to Chuchow Hun and Changsha in Hunan.

The chief engineering difficulties would be the construction of a large bridge at Loping requiring fifteen 100-ft. spans, and of another bridge 50 miles to W. near Takitu which will require at least 2,000 ft. of waterway and a high bank leading up to it, as the valley is subject to very heavy floods.

If this alinement be adhered to the main line will not pass

through Wuhu, and the existing Wuhu–Ningkwofu railway will be operated as a branch line. The scheme may, however, undergo further changes, not only because the outbreak of the European War prevented the British Chinese Corporation from raising the necessary loan, but also because an alternative proposal to run the trunk line from Nanchang to Hangchow or Kashing (on the Shanghai–Hangchow–Ningpo line) instead of Nanking, has, according to press reports, been recently (1916) suggested.

XIV. Tsingkiangpu–Haichow Railway

As already stated (see railway No. VII) it was originally intended to continue the Lung-Hai or Lanchow-to-the-Sea railway eastward beyond Süchowfu via Tsingkiangpu to Haichow. As the idea of constructing at Haichow a port for ocean-going steamers seems to have been abandoned, it is doubtful whether this section of the line will ever be built. Under the conditions now prevailing at Haichow the railway would be almost entirely dependent on the salt trade, and would probably find it difficult to compete with the Yen Ho (No. 1), by which salt is now conveyed to Tsingkiangpu.

The length of the line would be approximately 70 miles.

For a description of the country through which the railway would pass see Route 28.

XV. Tsingkiangpu–Tungchow (or Haimenting) Railway

When it was realized that the cost of constructing a port at Haichow would be prohibitive, the scheme of linking up the Lung-Hai system (see railway No. VII) with a port on the Yangtse met with considerable support. Both Tungchow and Haimenting were suggested as the possible terminus of the railway.

The new scheme, including as it does the construction of a branch line from Shaopo to Kwachow, the Yangtse port at the mouth of the Grand Canal, would run parallel to the Grand Canal and would have to reckon with the competition

of the latter. There are, however, considerable difficulties in the way, and a final decision is still awaited.

The length of the railway would be about 170 miles.

XVI. Icheng–Taichow Ku Railway

According to reports of 1911 the holders of licences for dealing in salt have decided, with government permission, to build a railway from Icheng to Taichow Ku, with a branch to Shiherhwei, the great salt dépôt on the Yangtse.

This line will cross the Grand Canal at Kwachow and pass up the eastern bank of the canal as far as Yangchow, whence it will go to Taichow Ku via Siennümiao. The line was already surveyed in 1911—estimated length 48 miles—but construction has not yet begun. The earthwork will be light, but there will be some important bridges; one of 800 ft., one of 250 ft. and several smaller.

XVII. Pukow Ku–Kwachow Railway

It was originally intended to continue the Tientsin–Pukow railway to Kwachow, opposite Chinkiang. On the completion of the Shanghai–Nanking railway the scheme was modified and the line was terminated at Pukow Ku opposite Nanking, as it was thought inadvisable to build on the northern bank of the Yangtse a railway which would compete with the Nanking–Chinkiang section. As the older project has again been revived it is, however, still possible that it may some day be carried out, either independently or in connexion with the Icheng–Taichow Ku scheme (see railway No. XVI). The distance from Pukow Ku to Icheng would be about 35 miles.

XVIII. Kaomi–Hanchwang Railway

This railway was intended to link up the port of Tsingtau with Süchowfu in order to divert the traffic of the Lung-Hai system from its natural outlets on the Yangtse to the harbour in Shantung. The project is the outcome of negotiations,

extending over nearly two years, for the completion of the railway programme outlined in Part 2, Article 1 of the Kiaochow Convention. The agreement for the construction of this line was signed on December 31, 1913, between the German Minister and the Chinese Ministry of Foreign Affairs.

The railway was to be constructed as a Chinese Government railway under German direction with German engineers and accountants and with German capital and materials. Germany in return waived the rights conferred by Part 2, Article 4 of the Kiaochow Convention upon German subjects to hold and develop mining property for a distance of 30 li from each side of the railway and along the whole extent of the lines.

The line would have been located entirely in the province of Shantung, passing through Ichowfu and Yihsien, but the company would probably have acquired running powers on the Tientsin–Pukow railway between Hanchwang and Süchowfu.

Estimated length about 220 miles.

An alternative scheme has apparently been proposed by which the railway would link up with the Tientsin–Pukow and the Lung–Hai system at Süchowfu, and pass through Taierhchwang instead of Hanchwang.

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NOTE

Type.—All places on the Routes are printed in **black type**; the chief towns appearing in **BLACK CAPITALS.** Names of mountains, rivers, lakes, city gates, bridges, locks, temples, &c., are given in *italics.*

Abbreviations.—The following abbreviations have been used: N. = north; S. = south; E. = east; W. = west; P. = post-office or postal agency; T. = telegraph office; RS. = railway station. The letters 'r.' and 'l.' signify 'right' and 'left' with reference to the direction in which the route is described.

SOUTH KIANGSU

ROUTE 1

CHINKIANG TO HANGCHOW (CHEKIANG)

Authorities: Route (A): Gandar, Canal Impérial, 1894; A. H. Hilton-Johnson, Dec. 1906 (Sect. 1–3), Oct. 1906 (Sect. 4); H. R. Davies, Jan. 1907 (Sect. 5), March, 1907 (Sect. 6).
Route (B): W. H. Johnston, April, 1909; China, Marit. Customs, Returns of Trade, 1914; Imp. Japanese Rys. Official Guide, vol. iv, 1915.
Route (C): Darwent, East of Asia, 1902; Richthofen, vol. iii, 1912.
Route (D): G. E. Pereira, Dec. 1907; W. H. Johnston, April, 1909.
Route (E): H. R. Davies, March, 1907, Apr. 1909; War Office Map, Kiangyin and Hangchow, 1908.

General direction, S. Chinkiang and Hangchow are both connected by railway with Shanghai. The two termini at Shanghai are being linked up by a loop line, so that by the end of 1916 through trains will be able to run between Chinkiang and Hangchow. (For details of the railways see p. 100 &c.)

Various water routes are available:

(A) Via Soochow and Kashing (206¾ miles)

This is the main water route and lies entirely along the *Grand Canal*. (For detailed description of the latter see Chap. VIII.) This route can be conveniently divided into the following sections:

(1) *Chinkiang to Tanyang* (20½ miles)

General direction, SE. The original course of the canal runs under the S. wall of Chinkiang and has an exit into the Yangtse near the British Concession. In winter this waterway is practically dry at low tide and traffic reaches the

Yangtse through Tantu. The canal is tidal throughout this section. Average force of tide, 2 miles per hour. Average rise and fall, 1½ ft. The average width of canal is 15 yds., and the average depth 7 ft. In winter both are much reduced, the depth often to 1½ ft. in places. The canal is a regular steam-launch route between March and November, at which time it is navigable for vessels up to 4½ ft. draught and 16 ft. beam. No launches run in winter. Passing would be difficult at most points owing to gently sloping banks.

The country generally is high, dry, rolling, and broken, and is passable for all arms. Much of it is uncultivated grass downland. It is sparsely wooded, and creeks are very few. The banks are high throughout—often 70 ft.—and give good view from the top; they are very liable to slip and thus block the waterway. Villages are substantially built and would offer fair accommodation. The lagoon (Lien Hu, or Tan-yang Hu) bordering the l. bank for last 4 miles is about 10 ft. deep in summer and nearly dry in winter. There is a good and continuous towpath throughout, passable for animals and wheelbarrows. As far as Huang-ni-pa the route is frequently commanded by hills.

miles	
0	**CHINKIANG,** P. T. RS. (see *Gazetteer*). Canal leaves the Yangtse, passes West Gate and *South Gate* (distances are given from the latter).
5¼	**Tantu,** P., market town (250 houses). From here creek (¾ mile long) affords good outlet to the Yangtse. A good paved or mud track, 2 ft. to 4 ft. wide, and passable for animals and wheelbarrows, leads to East Gate of Chinkiang.
8¼	**Tushan** (or Yüeh-ho-chên, or Yüeh-ho-tsêng), P., market town on l. (100 houses). From here river of same name (2¾ miles long) affords good outlet to Yangtse, passing through Kienpi.
12½	**Sinfeng Ku** (Sing-fung-tsêng), P. RS., market town (1,000 houses). From here good paved or mud track, 2 ft. to 4 ft.

miles	
	wide, and passable for animals and wheelbarrows, leads to South Gate of Chinkiang. The Nanking–Shanghai Ry. crosses canal by a bridge about 3 miles south of the town. The railway station is SE. of bridge. The line continues near the eastern bank of the canal as far as Soochow.
15½	**Huang-ni-pa** (Wang-ni-po), village on r. (100 houses).
17	**Chang-kuan-tu-shih** (Tsang-kuen-tu-ssŭ), market town on r. (200 houses).
(?)	**Ch'i-li-miao.**
20½	**TANYANG,** P. T. RS. (see *Gazetteer*). Canal approaches by the north and west wall.

(2) *Tanyang to Changchow Ku* (27 miles)

General direction, SE. The canal is very slightly tidal S. of Tanyang. Its width averages 25 yds. and is fairly uniform. Average depth, 7 ft. It deepens and widens on leaving Tanyang. It is a regular steam-launch route from March to December, and is then navigable for vessels up to 5 ft. draught and 16 ft. beam. No launches run in winter, it being then navigable for vessels up to 2 ft. draught only. Large boats could pass each other almost anywhere.

The country generally is flat, well cultivated, sparsely wooded, and with very few creeks. It is above highest water-level and passable for all arms. The banks are 10 ft. to 25 ft. high, and no view from boats is possible. A continuous towpath, passable for animals and wheelbarrows, follows the route throughout.

miles	
21	**TANYANG,** P. T. RS. Canal leaves by the *East Gate* ; it widens and becomes deeper.
? 24½	**Ch'ing-yang-p'u.**
27¼	**Ling-k'ou,** RS., market town (100 houses).
? 30¼	**Ta-wang-miao.**

miles	
33½	**Lücheng,** P. RS., market town (700 houses).
36¼	**Chiu-li-p'u,** village (50 houses).
39¼	**Penniu,** P. T. RS., market town on l. (800 houses). From eastern end good creek gives outlet to Yangtse and is navigable in summer for vessels of 4½ ft. draught, but in winter it narrows in places to 8 yds., and shoals to 2 ft.
42½	**Lien-chiang-ch'iao** (Li-kang-chiao), village on l. (30 houses).
44	**Hsin-cha** (Hsin-za-tsŭ), village (100 houses).
48	**CHANGCHOW KU,** P. T. RS. (see *Gazetteer*). Route before entering *West Gate* runs for a mile through north-west suburb.

(3) *Changchow Ku to Wusih* (25¾ miles)

General direction, SE. Tide and current effects are practically nil. The canal is of a uniform width of 30 yds.; the average depth is 8 ft. It is a regular steam-launch route and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large vessels could pass each other practically anywhere. The country generally is flat, well cultivated, sparsely wooded, and with very few creeks. As far as Wanglin the banks are 10 ft. to 20 ft. high, and no view from boats is possible. The country lies above highest water-level, is dry and passable except for the last 5 miles where it is low and swampy. A continuous towpath, passable for animals and wheelbarrows, follows the route throughout.

miles	
48	**CHANGCHOW KU,** P. T. RS. The *West Gate* is in direct water communication with other gates via E. and N. wall.
50¼	Mouth of creek on l. Distance to South Gate, 1,000 yds.
51¼	**Po-chia-ch'iao** (Pa-ku-chiao), S. suburb of Changchow Ku.

miles

53¾ **Ting-yen-chên** (Ting-yeh), market town (40 houses).

56¾ **Chishuyen,** P. RS. (railway name Tsi-shu-yen), market town (200 houses), chiefly on l.

A creek goes NE. to Shihyen (see Route 15, mile 13¾).

59¼ **Wanglin,** P. RS. (local name, Wang-ling-tsêng ; railway name, Heng-lin), market town (400 houses).

62 **Wu-ma** ('Ng-mo), village (30 houses).

64¾ *Hua-tu-ch'iao* (Hu-tou-chiao). Single-arch bridge over creek on r.

This creek leads to Ihing (see Route 16).[1]

65¼ **Loshè** (Lo-za), P. RS., market town (400 houses).

68½ *P'an-fêng-p'u.*

69¼ **Wan-an-ch'iao-hsün** (Van-ê-chiao-sing).

70½ *Kao-ch'iao.* High single-arch stone bridge on l.

Mouth of creek to Kiangyin (see Route 14).

73¾ **WUSIH,** P. T. RS. (see *Gazetteer*). Route enters by *North Gate* after passing for 1 mile through north suburb. Waterway much congested. This gate is in water communication with all others, via E. and W. wall.

(4) *Wusih to Soochow* (30¾ miles)

General direction SE. The canal is practically non-tidal, but has a sluggish current flowing SE. Its average width is 35 yds. and average depth 10 ft. It is a regular steam-launch route, and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large vessels could pass each other anywhere.

The country generally is undulating and broken, well cultivated (chiefly mulberry), with a wooded appearance, and is much intersected by creeks. Near Soochow it is low and swampy ; elsewhere it is well above flood-water level, and the banks usually prevent any view from boats. There is a towpath throughout, occasionally broken by creeks.

[1] According to War Office map, the entrance to the main creek is at Wu-ma, mile 62.

Alternative routes on approaching Soochow are :

a) South-east, leaving the Grand Canal at the Powder Magazine, through the suburb known as San-tang-lang to the Ch'ang Mên (Ts'ang Mên).

(*b*) West from Fengkiao Ku to the Ch'ang Mên.

As regards (*a*) it is always navigable, but is not used by launches owing to narrow entrance bridge (16 ft. waterway) and the constriction of last half-mile.

As regards (*b*) it is always navigable, but narrow and congested, and as a rule is only used by launches entering from the NW.

Half a mile from the Ch'ang Mên on l. is a camp, about 150 yds. by 150 yds., surrounded by a wall 12 ft. high and 2 ft. thick. In October, 1906, it was occupied by 65 modern-drilled cavalry with ponies. Half a mile farther on r. is a barracks surrounded by a wall, 8 ft. high, $1\frac{1}{4}$ ft. thick. The enclosure is about 250 yds. by 200 yds. and could accommodate 1,500 men.

About a mile NW. of Hushukwan the canal passes between hills 100 ft. to 200 ft. high and half a mile distant. The banks are here 6 ft. to 10 ft. high. Movement by land would be difficult owing to creeks, but on the other hand the country between the creeks affords good cover, and is usually dry and passable.

miles	
$73\frac{3}{4}$	**WUSIH,** P. T. RS. At *North Gate* branch r. goes to West and South Gates via city wall : navigable but not generally used owing to sharp turn and narrow bridge outside South Gate. Branch l. keeps about $\frac{1}{2}$ mile from city wall, and meets the other branch again $\frac{1}{4}$ mile beyond South Gate.
$76\frac{3}{4}$	
$78\frac{3}{4}$	Route leaves SE. suburb of city.
$81\frac{1}{4}$	**Chou-ching-hsiang** (Chow-king-hang), RS. $\frac{1}{4}$ mile NE.
$83\frac{3}{4}$	**Sinanchen Ku S** (Sing-o), P., market town (100 houses).
$86\frac{1}{4}$	**Pei-wang-t'ing** (Po-mang-ting), village on l.
$87\frac{1}{4}$	**Wangting** (No-mang-ting), P. T. RS., market town (200 houses).

miles	
89¾	**Chin-chi-hsün.**
92	**Hushukwan** (Si-zŭ-kuan), P. RS., market town (500 houses).
92¾	*Wên-ch'ang-kung.* Temple on top of hill 50 ft. high on r., surrounded by loose brick wall about 80 yds. by 120 yds., and 1½ ft. thick, commands canal.
95¼	**Sa-tao-k'ou** (? Shê-tu-p'u, according to Gandar). Mouth of creek on r. In 1906 magazine contained gun and S. A. powder, but no made-up ammunition. Surrounded by 15-ft. brick wall, 12-ft. moat, 10-ft. brick wall, and 6-ft. earth bank (approx. measurements), and had a guard of 20 men.
97¼	**Fengkiao Ku** (Fung-chiao-tsêng), P., market town (50 houses). Route (b) leaves Grand Canal. Just north-west of village is a camp about 150 yds. by 150 yds., surrounded by a wall 12 ft. high and 2½ ft. thick. In October, 1906, it was being rebuilt inside for cavalry occupation.
99¾	**Hengtang** (Wang-tang-tsêng), P., market town on r. (150 houses). Route passes under bridge and proceeds north-east.
101¾	**SOOCHOW,** P. T. RS. (see *Gazetteer*). Route enters the Hsü Mên (the southern of two gates in W. wall).
104½	*Customs Buildings* at SE. corner of City Moat.

(5) *Soochow to Kashing* (39 miles)

General direction SSE. Canal navigated by steam-launches all the year round. In the town of Pingwang at mile 126¾, the water is sometimes only 4 ft. deep, especially in winter. Launches then have to go round to the east, turning off 1¼ miles short of Pingwang and rejoining the canal ½ mile beyond the S. end of Pingwang. Except at Pingwang there seems to be at least 7 ft. of water throughout. The canal varies from 20 yds. (at Pingwang) to 100 yds. in width. The average is 50 or 60 yds.

A road, good for towing and passable for horses, runs along the canal the whole way, chiefly on the r. bank, but crossing once to the l. bank for 2 miles. From mile 118¾ to mile 138 an unbridged ditch 3 to 10 yds. wide runs alongside the road on the r. bank, cutting it off from the surrounding country. The bank opposite to the road is usually not practicable for walking owing to unbridged side-creeks.

The current runs S. as far as the big creek which crosses the canal at mile 110½, near Chia-p'u-ch'iao. From here onwards the current runs N. Side-creeks from the r. come in with a strong current. There are no bridges low enough to interfere with navigation.

miles	
104½	**SOOCHOW,** P. T. RS. Route leaves from the Customs Buildings outside the city near the SE. corner of the moat.
105½	Large barracks on r. bank, in enclosure 300 yds. square, surrounded by 6 ft. wall.
106	Rifle range on r. bank. *Mi-tu-ch'iao.*
106½	*Pao-tai-ch'iao* (Po-ta-chiao). A stone bridge 300 yds. long, with 53 small arches, crossing the mouth of a small lake called *Tan-t'ai Hu*, which joins the canal on the r. Near the centre of the bridge is a bigger arch for passage of large boats. From this lake a creek goes off connecting with the *T'ai Hu.* A creek here which goes off to the l. is the main launch route between Soochow and Shanghai, see Route 5 A.
108¼	*Yin-shan-ch'iao* (Nying-sän-chiao). One-arch stone bridge across canal : large stone abutments. ¼ mile E. of bridge, *Yin Shan*, a hill.
110½	A creek 60 yds. wide, crossed here by a five-arch stone bridge, goes off to r. to the T'ai Hu (Great Lake), and a creek said to be passable for big boats goes off to l. to the Soochow creek.

miles

111 *Chia-p'u-ch'iao* (Ka-p'u-chiao). One-arch stone bridge across canal. Road and telegraph line cross to l. bank. Width of canal here 60 yds., depth 9 ft.

113 *San-li-ch'iao*, one-arch stone bridge by which road recrosses to r. bank.

Wukiang Ku ('Ng-kang-yüen), P., walled city (800 houses) ¼ mile away on the r.

Three or four small creeks lead from the canal to the city.

113¼ A creek to l. leads to the market town of Tungli Ku.

114 **T'ang-chia-fang** (20 houses).

114½ A creek to r., crossed here by a five-arch bridge, leads to *T'ai Hu*. Ferry.

Canal has here narrowed to 40 or 50 yds., and is 7 ft. deep.

116 A creek to l. to Tungli Ku.

Po-lung-ch'iao.

118¾ From here on to mile 138 an unbridged ditch 3 to 10 yds. wide separates the road on the r. bank from the surrounding country.

120¼ **Pa-ch'ih-chên** (Pu-ts'a), market village (200 houses) on l. bank.

A creek to the r. leads to the T'ai Hu; it is crossed by seven-arch stone bridge.

122¼ A small lake on the r. From here begins a series of lakes on both sides, at from ¼ to ½ mile from the canal.

123½ **Shêng-tun** (Sêng-têng), 25 houses.

124¼ The canal here narrows for a little distance to 30 yds.

125½ A creek branches off to the l. to Lili. This also connects with the launch route from Pingwang to Shanghai (Route 4 A). When the water is too shallow for launches to Pingwang, they turn off by this creek, crossing a small lake called Wu-po-t'ang, and rejoining the Grand Canal ½ mile south of Pingwang. This

miles

alternative route is nearly the same distance as the main canal.

126¾ **PINGWANG,** P., market town (800 houses), mostly on the r. bank. The canal is crossed in the town by two fine one-arch stone bridges. In the town the canal is from 20 to 30 yds. wide. It has sometimes only 4 ft. depth in winter, and launches then take the alternative route described above.

127¼ At S. end of town a creek goes off to the r. to Huchowfu under a one-arch stone bridge.

Launches run regularly from Shanghai through Pingwang to Huchowfu (see Route 1 B).

127¾ A creek to the l. to Shanghai, navigated by launches (see Route 4 B). The alternative branch route mentioned above rejoins Grand Canal here.

129¾ Creek to the r., crossed by a three-arch stone bridge, into a little lake and on to Shingtseh (Sang-za), P. T.

? *Chi-ch'ing-ch'iao.*

130½ A small lake on the r.

132 **Shih-pa-li-miao** (Ssŭ-pa-li-miao), village (15 houses) on the r. bank.

133 **Ch'i-li-wan** (Ts'i-li-wän), village (16 houses) and likin station.

? **Li-ching-p'u.**

135 A small creek to the r., forming the boundary between the provinces of Kiangsu and Chekiang. On the l. bank the boundary is farther N.

135¼ **Wangkiangking,** P., market village (300 or 400 houses) on the r. bank.

A creek goes off to the r. to Shingtseh and Huchowfu, said to be passable for small boats only.

The canal is here bridged by a three-arch stone bridge.

Beyond bridge a creek to the l. to Kashan, said to be passable for big boats but not for launches.

138 The unbridged ditch, 3 to 10 yds. wide, which has

miles	
	separated the road on the r. bank of canal from surrounding country since mile 118¾, ends here.
140	**Chin-ch'iao-p'u.**
141	A creek to the r., said to lead to Shuang-ch'iao.
142½	**Ti-ssŭ-yüan,** village on l.
	Creek to the l. goes to Shanghai (see Route 3 A, mile 62¼).
143	**KASHING,** P. T. RS., walled city with large supplies. N. suburb of city begins here on both banks of canal. Catholic mission on l. bank, enclosed by 6 ft. wall, 150 by 200 yds. Just beyond this, on the l. bank also, are the Customs Buildings. See *Gazetteer.*
143½	*North Gate* of city.

(6) *Kashing to Hangchow* (63¼ miles)

General direction, SW. As far as the Foreign Settlement at Hangchow the canal is generally used by launches all the year round. Occasionally, at exceptionally low water, the canal is too shallow at Shihmenwan and at Shihmen Che for launches to navigate. They then have to take a more westerly route at Pingwang, rejoining the Grand Canal at Wu-li-t'ou or Tangsi (see Route 1 B). The average width of the canal up to Tangsi is 50 yds., and beyond Tangsi 80 to 100 yds. Passing through cities and towns, it narrows in places to 15 or 20 yds., and the narrowest bridges are only 8 to 10 yds. wide. The depth is usually enough all the year round for launches drawing 4½ ft., and in most places it is far greater than this. There is no tide in this part of the canal, but there is a slight current from the direction of Hangchow. Strength of current in March is less than ½ mile an hour at Kashing, and still less near Hangchow.

Towing from the bank is practicable throughout, except when passing through Shihmenwan, Shihmen Che, and Tangsi, where houses close to the bank prevent it. A road follows the canal all the way. As far as Shihmen Che it is the main



A 'HAULOVER'

road to Hangchow, is followed by the telegraph line, and is passable for horses. Beyond this it becomes narrow and bad, and in places overhung with mulberry-trees, so that horses would have to be led. Bridges and ferries are numerous. No bridge is small enough to form an obstacle to navigation.

Launches do not run beyond the Settlement, and the route to the city leaves the Grand Canal almost immediately by a creek with a depth of 2½ ft. when the water is low. This creek leads into the Shang Ho or Haining Canal by a haul-over lock, up which boats of not more than 11 ft. beam can be hauled, if not too heavy. In the Haining Canal deep water is again found, right into the city by the Pa-tzŭ Mên water-gate. The Shanghai–Hangchow railway connects Kashing with Hangchow, but runs many miles S. of the canal. The Foreign Settlement is linked up with the main line at Kên-shan Mên (railway name, Ken-Shang Mun) by a branch 4½ miles long.

miles	
143½	**KASHING,** P. T. RS. From the *North Gate* round by a moat, which is here formed by the Grand Canal, to
144½	*Great West Gate.* The canal 200 yards from the city wall is crossed by a one-arch stone bridge. From here it turns westwards away from the city. The width of the canal varies from 40 to 60 yds. Sluggish current of ½ mile an hour from direction of Hangchow.
145¼	**San-t'a.** Three small pagodas and few houses on r. bank.
146¼	*Yao-fên* (Yo-vên). Temple on r. bank.
148¼	**Mu-chia-ching** (Mu-ka-ching), 6 houses.
150	**T'ao-chia-chien** (Tao-ka-chien), village (50 houses) on r. bank.
151¾	**Tou-mên,** village (20 houses) on both banks, and one-arch stone bridge called *Ta-t'ung-ch'iao.*
153¾	**Chêng-chia-chien** (Tsêng-ka-chien), village (10 houses) on r. bank : ferry.
155¾	**Yung-hsin** (Yung-sing), village (12 houses) : ferry. Creek to r. to Wu-tsêng and l. to Tutien, both said to be passable for big boats.

miles

157½ **Mao-chia-tu** (Mo-ka-tu), 12 houses.

158¾ **Shuang-ch'iao** (Suang-chiao), village (20 houses) and two one-arch stone bridges 200 yds. apart.

Main creek to **Tunghianghsien** (Tung-hsiang-yüen), P. T., goes off to l. between the two bridges. The city is about 2 miles S. of Grand Canal.

159¾ *Tsung-yang-miao.* Temple on r. bank.

Creek to the r. to Wu-tsêng, said to be passable for big boats. Creek to l. to Tunghianghsien, P. T., said to have some low bridges across it.

161¼ **Ch'ien-tien-tu** (Sien-tien-tu). Three houses and one-arch stone bridge.

162¼ **Ta-wang-miao,** 3 houses and temple.

164 Creek to r. to Wu-tsêng, said to be passable for big boats.

164¾ **Shihmenwan** (Za-mên-wän), P., market town of 300 houses on both banks. Canal crossed by two one-arch stone bridges. Narrows here to 20 to 30 yds., widening again after leaving village.

166¾ **T'ai-kung-tu.** Big temple (*San-kuan-tu*) on r. bank.

167¾ Creek to r. to Hsing-ssŭ, said to be passable for big boats.

168 Creek to l. to Tutien, P., said to be passable for big boats.

170 *Pei-san-li-ch'iao* (Pu-sän-li-chiao), temple on l. bank and one-arch stone bridge.

171 **SHIHMEN CHE** (Za-mên-yüen), P. T., through a small suburb to the North Gate of Shihmen Che and follows its walls round to beyond the small South Gate. City and suburbs contain about 600 houses (see *Gazetteer*). Canal is crossed in the northern suburb by one-span bridge of beams of wood covered with stone slabs, at the East Gate by a one-arch stone bridge, and at the small South Gate by a one-arch stone bridge.

In the northern suburb a creek, said to be passable

miles

for big boats, goes off to the r. to Tzŭ-hsieh and Hsing-ssŭ.

172 Canal turns away from the city wall.

172¼ Canal turns to r. under one-arch stone bridge. Road crosses here and follows down l. bank.

The main road to Hangchow, and the telegraph line, leave the canal just beyond this, turning southward and following another creek. This creek goes to Changan, where there is a lock over which boats have to be hauled (see Route 1 E, mile 176¼). From here the road down bank of canal becomes rough and narrow, only just passable for horses.

174½ *P'êng-ho-ch'iao* (Pang-wu-chiao), one-arch stone bridge.

175½ *Sung-lao-kao-ch'iao*, one-arch stone bridge, by which road crosses to r. bank, which it follows.

177 *Nan-shêng-t'ang* (Nên-sêng-tang), temple on r. bank ; ferry.

178¼ **Tama,** P., main village lies ½ mile to the l. off the canal. Few houses on canal and one-arch stone bridge.

180¼ **Polu,** P., village is ¼ mile to the l. off canal.

Creek turns off through the village, said to be passable for big boats to Ling-po.

180½ *Po-lu-shuang-ch'iao* (Po-lo-suang-chiao), two one-arch stone bridges, ¼ mile apart. Road crosses to l. bank.

182½ **Wu-hang** (Ung-hang), village (70 houses) to the l. off the canal. Few houses on canal bank and one-arch stone bridge across it.

Just before the bridge a creek goes off to the r. to Hsing-ssŭ.

Road crosses by bridge to r. bank.

184½ *Lung-kuang-ch'iao*, one-arch stone bridge by which road crosses to l. bank. Just beyond this a creek, crossed at its mouth by a seven-span stone-slab bridge, goes off to the r.

miles

186¾ *K'ua-t'ang-ch'iao.* Three-arch stone bridge by which road crosses to r. bank.

187¼ Temple on r. bank and also on an island. Just beyond this the waterway forks, a creek going to the l. front into another part of Tangsi, whilst the canal keeps to the r. front.

188 **Tangsi,** P., market town with 500 houses and good shops on both banks: principal street on l. bank. Thirty cargo boats, 50 ft. long, counted here in March, 1907, also numerous other boats. Canal is crossed by one-arch stone bridge at entrance to town, and five-arch stone bridge near farther end of town.

Near the first bridge a creek goes to the right to Hsing-ssŭ, under a three-arch stone bridge. Near the second bridge creek goes to the r. to Huchowfu (see Route 1 B, mile 192¾). Road crosses to l. bank by first bridge.

191 **Wu-li-t'ou** (Ung-li-tou). Two creeks to the r.

The first is the launch route to Huchowfu (see Route 1 B, mile 195½), the second goes to Ping-chiao. Few houses on r. bank between these two creeks. On l. bank disused stone fort commanding all the waterways which meet here. Fort 50 yds. each side, stone wall 3 ft. thick and 20 ft. high. Ports, 2½ ft. high and 1½ ft. wide, for guns, near bottom of wall. Inside wall are casemates made of brick arches, roof of casemates forming banquette, 15 ft. wide, all round the top of the wall, which is surmounted by remains of brick wall, 3 ft. thick.

194¼ **Wang-chia-chuang** (Wang-ka-tsuang), village (25 houses) on both banks.

196¼ **Tsung-kuan-t'ang** (10 houses).

198 **Pai-shu-t'ou** (Pa-ssŭ-tou). Village (30 houses) on l. bank.

199½ **Hsieh-ts'un** (Sia-ts'êng), village (35 houses) on l. bank.

miles

$201\frac{1}{4}$ **HANGCHOW,** P. T. RS., **Foreign Settlement.** British Consulate, on r. bank.

$201\frac{1}{2}$ Customs Buildings on l. bank.

$201\frac{3}{4}$ *Kung-ch'ên-ch'iao* (Kung-sêng-chiao). Three-arch stone bridge. Here the Settlement ends and a big suburb of 2,500 houses called **Hushu** (Wu-ssŭ), P., begins, stretching from here for 4 miles to the *Wu-lin Mên* (Gate) of the city of Hangchow. Launches do not go beyond this bridge, but could go on to **Hsin-ma-t'ou** (Sing-mo-tou).

202 To go into the city of Hangchow by water the Grand Canal has to be left here by a creek 20 yds. wide and $2\frac{1}{2}$ ft. deep when the water is low ; it turns off to the l. under a one-arch stone bridge. A road follows bank of creek.

The Grand Canal can, however, be followed further, passing the *Pei-hsin-ch'iao* (bridge) at mile $202\frac{1}{2}$ and the *Chiang-chang-ch'iao* (bridge) at mile $203\frac{1}{2}$. Beyond this the canal forks, both branches ending in about $\frac{1}{4}$ mile. The left-hand branch, which passes under a three-arch bridge, is considered the main canal, and its end is called **Hsin-ma-t'ou**. From here there is a road, passable for horses, reaching the Wu-lin Mên (the most westerly of the two northern gates of the city) in $1\frac{1}{2}$ miles from Hsin-ma-t'ou, $61\frac{3}{4}$ miles from the North Gate of Kashing.

$203\frac{1}{2}$ *Yao-chia-pa* (Yo-ka-po), a haulover lock by which boats pass to the higher level of the *Shang Ho* or *Haining-Hangchow Canal.* Width of lock, $11\frac{1}{2}$ ft. Boats are hauled up by ropes fastened to capstans on each bank, sixteen men in all work the capstans. Time for each boat about 8 minutes. Chinese passenger-boats of not more than 11 ft. width can be hauled up. Loaded cargo-boats are too heavy unless very small.

$203\frac{3}{4}$ **Shentang Che** (Sêng-tang-wän), P., village (20

miles	
	houses). Railway bridge by which branch railway from Hangchow to the Foreign Settlement crosses the creek.
205	**Tung-hsin-kuan.** Village (6 houses), and one-arch stone bridge. Canal here turns to l.
	Another creek going straight on is said to lead to *Wu-lin Mên*, city gate.
206½	**HANGCHOW,** P. T. RS. Treaty Port (see *Gazetteer*, Chekiang). Route reaches the moat of the north face of city, and turns along it to the l.
206¾	Route enters city by *Pa-tzŭ Mên* (water-gate) the arch of which is 20 ft. wide and 15 ft. high.

(B) Via Pingwang and Huchowfu (211¼ miles)

This longer route is followed by steam-launches when the Grand Canal becomes too shallow for navigation between Kashing and Shihmen Che. A regular service of steam-launches is maintained all the year round by a Japanese company (Nisshin Kisen Kaisha). As far as Pingwang the itinerary is the same as for Route 1 A.

miles (approx.) from Chinkiang	
127	**PINGWANG,** P. The route follows a canal which branches off to the W., at S. end of the town, and runs parallel to the southern bank of the *T'ai Hu* (a large lake with which it is connected by many creeks).
130	**Meiyen,** P.
134¾	**Shuang-yang-chên** (Sang-yen-tsêng).
136½	**Chentseh** (Sêng-sê-tsêng), P. T.
141	Route crosses the Kiangsu-Chekiang border.
?	**Nanzin,** P. T., a centre of the silk industry.
159	**Shên-shan-shih** (Sêng-sän-ssŭ).
168	**HUCHOWFU,** P. T., a large walled city. Pop. over 100,000. Much silk produced here. Plentiful sup-

miles (approx.) from Chinkiang

plies of every description can be obtained. Just outside the South Gate canal joins a waterway coming from the T'ai Hu through the western suburb of the city (see Routes 1 C and D).

General direction, S.

170 The canal opens out into a small and shallow lake nearly 2 miles long. Average depth 4 ft. 6 in. Steam-launches run slowly. Their channel is shown by black posts, on which are lights at night. Two channels lead to the lake from Huchowfu.

172 Canal 60 yds. wide on leaving the lake.

172¾ **Chiang-tung** (Kang-tung), 12 houses on r.

174 **Hsi-chia-hui** (Yi-ka-wei), 80 houses, on l.

175¾ **Tikiang** (Tieh-kang), P. A market village of 250 houses on r. Stopping-place for steam-launches. On entering the village the canal is only 20 yds. wide, but broadens out to 40 yds. after passing the village. Prominent temple to the north of village, on r. bank. Moderate quantities of fish, poultry, eggs, and vegetables are obtainable.

177 *Yung-hsing-an* (Yung-hsing-ei), temple on l.

178¾ **Linghu** (Ling-wu), P., a big market village (400 houses) on l., intersected by canals which take the place of streets. Stopping-place for steam-launches. Supplies of fish, eggs, poultry, and vegetables could be obtained in considerable quantities. ¼ mile before reaching the village the canal makes a bend to l. and broadens out to 150 yds.

181 *Shih-shih-an* (Ssŭ-ssŭ-ei) temple on l. Canal bends to r. and narrows again.

181¾ **Tung-tien** (Tung-ti), 40 houses, on r. At the beginning of this village the canal makes a sharp bend to l.

183 **Hsü-chia-tu** (Si-ka-tu), 80 houses, on r.

183½ *Kuan-ti-miao* (Kuei-ti-miao), temple on r.

183¾ **Shih-ao-li** (Ssŭ-wo-li), 20 houses, on l.

miles (approx.) from Chinkiang

185 **Shan-yi-wan** (Sei-yi-wei), small village (20 houses), with a conspicuous stone pagoda, about 700 yds. to l. Canal 25 yds. wide, turns to r. and widens to 50 yds.

185¾ **Hsia-t'ang** (Wo-tang), village (40 houses) on r.

The canal here makes a sharp bend to l. and again narrows to an average width of 25 yds.

187 **Ts'ai-wang-miao** (Ts'ao-wang-miao), 6 houses, on r. Stone-arch bridge over canal. Arch 40 ft. wide, 20 ft. high. Canal widens again.

189¾ **Wên-ch'ing-ch'iao** (Vang-ch'ing-ch'iao), 10 houses, on r. Stone-arch bridge over canal. Arch 50 ft. wide, 20 ft. high.

190 **Pei-so-yen** (Po-so-yi), 10 houses, on l. Canal opens out into a small lake.

190½ **Ch'iang-kung-lin-shu** (Ch'iang-kung-ling-ssŭ), 40 houses, on l.

190¾ **Ch'iang-kung-li,** 2 houses, on l.

191¾ **Lan-tien** (Lei-ti), a straggling village (80 houses) on r., with a small wharf at which steam-launches stop.

192½ **Shih-pa-yen** (Ssŭ-po-yi), 20 houses, on l.

192¾ **Pai-yün-ts'un** (Pa-ying-ts'êng), 6 houses and a temple on l. Single-arch bridge. Arch 50 ft. wide, 20 ft. high.

Just south of this village the canal from **Tehtsing,** P., to Tangsi crosses the route. It has a telegraph line along its north bank. The Grand Canal can be conveniently reached by this waterway, but the main route lies along the other branch.

193¼ **Wang-ch'ang-k'ou** (Wang-tsang-keu), 10 houses, on r. bank. Canal 60 yds. wide, narrowing to 50 yds. Numerous unbridged side-creeks.

195½ **Wu-li-t'ou** (Ung-li-tou). Route enters Grand Canal after passing under a single-arch stone bridge, at a place near a ruined stone fort (on l.),

miles (approx.) from Chinkiang

where the Grand Canal makes a sharp bend to the S.

From this point the itinerary is the same as for Route 1 A, from mile 191 onward.

$205\frac{3}{4}$ **HANGCHOW,** P. T. RS., **Foreign Settlement.**

$211\frac{1}{4}$ *Pa-tzŭ Mên* or Water Gate of Hangchow.

(C) Via Soochow and Huchowfu (about $201\frac{1}{2}$ miles)

This alternative route is not usually followed on account of the difficulties of navigation across the T'ai Hu. This large lake (over 1,000 sq. miles) is very shallow: it seldom reaches a depth of more than 5 or 6 ft. The banks, except in one place on the W., are very low, and for miles bordered by a belt of swamps overgrown with rushes. There are no large towns on the banks, and the avenues of trade lead not through the lake but along the numerous creeks which skirt it. Only boats with flat bottoms can safely attempt to cross the lake. Even these are sorely tried by the dangerous storms which sweep the lake. No reliable information was available concerning the journey from Hsü-k'ou-chên to Huchowfu.

As far as Soochow the itinerary is the same as for Route 1 A.

miles (approx.) from Chinkiang

102 **SOOCHOW,** P. T. RS. General direction W. The route leaves the Grand Canal just S. of the *Hsü Mên,* the southern gate in W. wall, and follows a beautiful creek. The banks are covered with vegetation, mulberry-trees, copses of forest trees, and bamboo groves, and spanned by fine bridges.

$104\frac{1}{4}$ **Hengtang** (Wang-tang-tsêng) P., 150 houses, bridge with gate-house in the middle. Route turns S., and $\frac{1}{2}$ mile farther on it turns W.

miles (approx.) from Chinkiang	
105¾	Bridge across the creek *Hêng Shan*, hill on r.
107¼	**Hsi-kua-t'ang-chên** (Si-k'o-tang-tsêng).
108¾	**Mutu,** P., small city, 1½ miles long, intersected by canals. Hills in neighbourhood.
112¼	**Hsü-k'ou-chên,** last village on the creek.
112¾	The creek enters the *T'ai Hu* along a lane of rushes.
	From Soochow there are two other creeks leading into the lake, one via Kwangfu, the other via Pao-tai-ch'iao on Grand Canal, 2 miles S. of Soochow.
	The route follows the eastern shore as far as
123¾?	**Miao-tzŭ-shan** (? Fêng-ch'i ; local name, Fêng-tzŭ), village on mountain slope, from the top of which a fine view of the lake is secured. General direction SSW. From here by boat to
129¼	**Chêng-hua-chên** (Tsêng-huo-tsêng), village on Tung-t'ing Shan, the principal island of the T'ai Hu. It has a pier of rough-hewn stone, to the east of which is a busy creek crossed by a bridge.
	General direction SW. across southern part of T'ai Hu.
147½	Mouth of the creek. Direction S.
154	Creek bifurcates. Route follows W. branch.
155	Bridge across creek.
156¼	Route meets creek coming from Ihing (see Route 1 D).
157	**HUCHOWFU,** P. T. West Gate.
158¼	*South Gate* of city.
	From here the itinerary is identical with that of Route 1 B, mile 168.
196	**HANGCHOW,** P. T. RS. **Foreign Settlement.**
201½	*Pa-tzŭ Mên*, or Water Gate of Hangchow.

(D) Via Loshe and Huchowfu (196 miles)

A short creek connects Wusih with the T'ai Hu, but for the reasons given above (Route 1 C) boats prefer to follow canals round the lake. They leave the Grand Canal ½ mile N. of Loshe (a village situated 8½ miles NW. of Wusih). From there the route follows up the Loshe River to Hsi-t'ai Hu (Si-t'a Wu), a lake marked Kê Hu on maps. It then continues S. down the Pin-yün (Ping-ying) River to Ihing. Here it turns E., crosses a small lake (Tung-chou Hu or Tung-chü Wu), turns S., enters the T'ai Hu at Wu-ch'i-kuan (Wu-ch'i-kuei), follows the western shore of the lake as far as Kiapu, where it again leaves the lake by a narrow but straight creek. Farther S. the canal becomes broader and winding. It rejoins Route B just south of Huchowfu. The section from Ihing to the Great Lake is regularly navigated by steam-launches. The country is a network of creeks and canals, and many alternatives are doubtless available.

The canals followed are non-tidal throughout. The width varies considerably. The narrowest portion (10 yds. wide) is between Kiapu and Changhing. Usual width 30 to 120 yds. Two boats can pass everywhere. The average depth is from 8 to 12 ft. The shallowest portion of the route is a small lake 4 miles S. of Huchowfu, which is only 4 ft. 6 in. to 5 ft. deep, compelling the steam-launches to run dead slow. The channel here is marked by posts. There is practically no current except after heavy rain, at which times it sets towards the T'ai Hu in the two canals which open into the lake at Kiapu and Wu-ch'i-kuan. The strength depends on the rainfall, but probably never exceeds 1½ miles per hour. The banks as a rule are 4 to 6 ft. high and obstruct any view of the country from a boat.

The waterway is navigable throughout at all times of the year by boats or launches up to 4 ft. draught. The large lake, known as T'ai Hu, is said to be liable to frequent dangerous storms. Launches run once a day each way between Hangchow and Huchowfu, every day between Wu-ch'i-kuan and

Ihing. Boats sail, pole or *yulo*, towing being rarely possible owing to the numerous unbridged side streams and the trees which grow on the banks. Large numbers of boats can be obtained at Huchowfu, smaller numbers at Tikiang, Changhing, Kiapu, and Wu-ch'i-kuan.

The following numbers were counted in April, 1909 :

At Huchowfu—40 cargo-boats, 50 ft. by 9 ft., capacity about 24 tons ; 30 large house-boats, 10 to 15 men ; 40 smaller house-boats taking 6 to 8 men.

At Tikiang—120 boats of *Sampan* class, 25 by 3 ft. to 5 ft. ; 10 large house-boats taking 10 to 12 men ; 35 smaller boats taking 6 to 8 men.

At Changhing—10 large house-boats taking 8 to 10 men ; 50 smaller boats of *Sampan* class, 30 ft. by 4 ft.

At Kiapu—5 large junks ; 30 boats taking 20 men ; 80 smaller boats taking 6 to 8 men.

At Wu-ch'i-kuan—20 boats taking 20 men ; 40 smaller boats taking 6 to 8 men.

Navigation is never interfered with by ice. The channel could be obstructed by sinking boats in the narrow parts of the waterway or by breaking down the bridges.

Bridges are few in number. The usual type is a single-span stone-arch bridge, of which the arch is 20 ft. wide, with 12 ft. to 18 ft. headroom. All bridges are high above the water and not likely to obstruct navigation at any time. The lowest bridge is one with 12 ft. of headroom at Changhing.

The country immediately adjoining the route is flat, highly cultivated, intersected by numerous creeks and canals, and dotted with villages. Almost the whole of the land is given up to the cultivation of mulberry-trees, and these entirely obstruct all view. There are practically no roads at all ; communication is maintained by water, and there is, as a rule, no towpath to the canals, the trees growing close to the water's edge. West of the route a long range of hills rises steeply to heights of from 1,000 to 2,000 ft.

The houses in the villages are of brick or stone, and would

afford good temporary accommodation for troops. Rice is the chief article of food of the people of the country. Fish, poultry, eggs, and vegetables could be obtained in small quantities at all the larger villages. Large supplies of every description are found at Huchowfu. Water is plentiful in the creeks and canals, and is quite fit for use after being boiled. The fuel commonly used is wood or charcoal.

As far as the entrance of the Loshe River into the Grand Canal, ½ mile N. of Loshe, the itinerary is the same as that of Route 1 A.

miles from Chinkiang	
64¾	*Hua-tu-ch'iao*, single-arch bridge 14 ft. above water and 5½ yds. wide over entrance to the *Loshe River*, here 30 yds. wide, 8 ft. 5 in. deep. There is a winding path to N. of river. For detailed description as far as Ihing see Route 16.
103¾	**IHING,** P. T., walled city (about 5,000 houses). At West Gate creek to Liyanghsien and Wuhu turns W.—(see Route 16, mile 39½). The route lies along canal which flows through the city, passing through water-gates in W. and E. walls. The canal is crossed by a stone bridge in centre of city.
104	Canal, now 15 yds. wide, leaves by small East Gate, passes through small suburb and makes a sharp bend to l.
105	**Ch'i-shih** (Ch'i-sa), 60 houses, on r. Canal broadens out to 150 yards.
105¾	**Wang-hang,** 10 houses, on l.
106¾	**Kuan-yi-miao** (Kuei-i-miao), 2 houses, on r. Canal opens into a lake, the *Tung-chou Hu* (Tung-chü Wu), following the southern shore.
108	*Shêng-shêng-kê* (Sêng-sêng-ko), conspicuous temple on r.
108¼	The route leaves the lake and enters a canal 100 yds. wide.

miles from Chinkiang

109 **Chang-shih-ch'iao** (Chiang-sa-ch'iao), 15 houses, on r.

The canal is here bridged by a three-span stone-arch bridge. Waterway of centre span 25 ft. wide, with 20 ft. of headroom.

110½ **Li-chang-tu** (Li-tsang-tu), 10 houses, on r.

111¾ **T'ang-chia-ts'un** (Tang-ka-ts'ên), 15 houses.

113 **Shu-shan** (Tso-sei), market village (200 houses). Pottery works. Moderate quantities of poultry, eggs, and vegetables to be obtained. The canal is only 15 yds. wide. While passing through the village it is bridged by a single-arch stone bridge : width of arch 24 ft., with 18 ft. of headroom. Beyond the village canal turns sharp to l. and then to r. For the first 2 miles it has an average width of 30 yds. and then broadens out to 100 yds. Towing impracticable owing to the numerous unbridged side creeks.

114 **Hsieh-chü** (20 houses), on l.

114½ **Shih-t'ang-ch'iao** (Sa-tang-chiao), 30 houses, on r.

116½ **Pai-nien-ch'ang** (Pa-ni-chiang), 4 houses, on r. Canal makes a sharp turn to l. Width about 40 yds.

117 **Wu-ch'i-kuan** (Wu-ch'i-kuei), village (80 houses). Canal bridged by a single-arch stone bridge ; arch 20 ft. wide with 20 ft. of headroom.

117½ 600 yards beyond the village canal (100 yds. wide) opens into the Great Lake (*T'ai Hu*). Route follows the W. shore and crosses the Kiangsu-Chekiang border, about 5 miles beyond.

125¼ *Ao-shan-miao* (Ngo-sei-miao). Temple and light-house on a low spur close to the shore of the lake.

127½ Route turns out of the lake by a creek to r. Towing impossible owing to trees and numerous unbridged side-creeks.

miles from Chinkiang

127¾ **Kiapu,** P., village (80 houses), chiefly on r. ¼ mile from the shore of the T'ai Hu. Single-arch bridge over canal 25 ft. wide with 15 ft. of headroom. Width of canal 15 yds. ¾ mile beyond this village canal turns to r. and widens again to 30 yds. Here it passes under a three-span stone-slab bridge, centre span 20 ft. wide with 12 ft. of headroom.

129 **Yang-hsü-ts'un** (Yang-si-ts'êng), 6 houses, on l. ¾ mile beyond this village the canal narrows to a width of 15 yds. for ¼ mile, after which it widens again to 30 yds.

130½ **Hou-yang-ts'un** (Heu-yang-ts'êng), 45 houses, on l. ½ mile beyond this village the canal narrows to 10 yds. for a distance of nearly ½ mile.

131½ **Ch'iu-t'ang-ts'un** (Chiu-tang-ts'êng), 10 houses, on l. Before entering this village the canal passes under a stone-slab bridge of five spans; centre span 17 ft. wide with 12 ft. of headroom,

132½ **T'ang-pei-ts'un** (Tang-po-ts'êng), 15 houses, on r.

133½ **Hsi-pai-ch'ien** (Si-pa-ch'i), 6 houses, on r.

134¾ **Changhing,** P., a walled city (1,500 houses), on r. It is of the *hsien* class, and under Huchowfu. The canal runs parallel to the E. wall through the small E. suburb. There are 4 bridges over the canal here; the lowest, leading to the East Gate, has 12 ft. of headroom; the narrowest—that leading to the small East Gate—has a centre span of 15 ft. wide. The city is quite unimportant, and no supplies beyond small quantities of vegetables, eggs, and poultry could be obtained. From here onward towpath available. Just beyond the city the canal bends to l., then sharply to r.

135¾ **San-li-ch'iao** (Sei-li-chiao), 3 houses, on r.
Canal bends to l. and becomes 15 yds. wide.

136¼ **Ssŭ-li-ch'iao,** village (10 houses) on l.

miles from Chinkiang	
136½	**Wu-li-ch'iao,** village (4 houses) on l. Canal broadens again to a width of about 40 yds. The towpath here crosses the canal from r. to l. bank by a single-arch stone bridge, with a waterway 40 ft. wide, and 20 ft. of headroom.
136¾	**Shih-chia-ku** (Ssŭ-ka-ku), village (10 houses) on r.
138	**Kua-t'ang-ch'iao** (Ko-tang-chiao), village (20 houses) on both sides of the canal. Stone-slab bridge of 5 spans over canal ; centre span 21 ft. wide, 20 ft. headroom.
139½	*Chang-wang-miao* (Tsang-wang-miao), temple on l.
140¾	**Lü-shan** (Li-sei), 60 houses, on both banks. The canal here turns to l. and becomes narrower. In this village there are two stone-slab bridges over the canal. The centre span of the smaller is 18 ft. wide, with 12 ft. of headroom. Towing becomes impossible owing to trees on the bank.
141½	**Pu-chien-ts'un** (Pu-si-ts'êng), 10 houses, on l.
142½	**Yin-ts'un-ch'iao** (Ying-ts'êng-chiao), 4 houses, on r. The canal is here bridged by a three-span stone-slab bridge ; centre span 20 ft. wide, 12 ft. of headroom.
143	**Shih-chia-p'êng** (Ssŭ-ka-pang), 2 houses, on r.
144¾	**Po-shih-ch'iao** (Po-ssŭ-chiao), 20 houses, on both sides. The canal is here bridged by a stone-slab bridge of three spans ; total width 45 ft., centre span 18 ft. wide, headroom 15 ft. Towing again becomes possible on l.
145¼	**Kuei-chia-ts'un** (Kuei-ka-ts'êng), 2 houses, on r.
147¼	**Cha-shui-ch'iao** (Sa ssŭ-chiao), 6 houses, on l. Towpath crosses to r. Canal 20 yds. wide broadens out again after passing under single-arch stone bridge ; waterway 15 ft. wide, 12 ft. of headroom.
148½	**Yang-chia-chuang** (Yang-ka-tsang), scattered village (50 houses) on r. Canal bends to l.

miles from Chinkiang	
148¾	**Wu-chia-ti-mên** (Ung-ka-ti-mêng), 6 houses on l. Canal bends to r. ½ mile beyond the canal curves to r. for ¼ mile and then to l.
149¾	**Ta-shui-wan** (Ta-sei-wei), village (6 houses) on l. Canal 120 yds. wide.
151½	**HUCHOWFU,** P. T., walled city. Plentiful supplies of every description can be obtained. The canal passes through a suburb outside the *West Gate*. It is crossed here by a three-span stone-arch bridge; waterway of centre span 30 ft. wide with 20 ft. of headroom.
152¾	*South Gate*. The canal passes under a single-arch stone bridge; waterway 30 ft. wide, 20 ft. of headroom. Just outside the South Gate the canal joins Route 1 B.
190½	**HANGCHOW,** P. T. RS., **Foreign Settlement.**
196	*Pa-tzŭ Mên* or Water-gate of Hangchow.

(E) Via Shihmen Che and Changan (about 201 miles)

This alternative route turns off from the Grand Canal ½ mile SW. of Shihmen Che in a southerly direction. A road and telegraph line follow the r. bank all the way to Hangchow. The Shanghai-Hangchow Ry. crosses the canal at Changan and again at Linping.

At Changan the Haining Canal (or Shang Ho) is entered by a haulover lock, up which boats of not more than 11 ft. beam can be hauled, if not too heavy.

miles from Chinkiang	
171	**SHIHMEN CHE,** P. T.
171½	Route leaves Grand Canal at a single-arch bridge, ½ mile SW. of the *Small South Gate* of the city. Hence nearly S. along the *Changan Creek*, following the main road and telegraph line to Hangchow. Creek about 30 yds. wide.

miles from Chinkiang	
174¼	**Chang-pu-yen** (Tsang-pu-yi). Six houses. Canal branches off here to Haining, P., 13 miles from Shihmen Che. Regular service of steam-launches.
176¼	**Changan** (Tsang-an), P. T. RS. The Shanghai-Hangchow Ry. crosses from l. to r. bank. From here the route lies along the *Haining Canal*, to reach which boats must be hauled over a lock. General direction WSW. A creek leads SE. to Haining.
186	**Linping,** P. RS. Railway line crosses again to l. bank.
198	*Yao-chia-pa* (Yo-ka-po), a haulover lock by which boats pass to the lower level of the Grand Canal : see Route 1 A, sect. 6, mile 203½.
198¼	**Shentang Che** (Sêng-tang-wän), P., small village. Branch railway from Hangchow to the Foreign Settlement crosses the creek.
201	**HANGCHOW,** P. T. RS., *Water-gate* (Pa-tzŭ Mên).

ROUTE 2

SHANGHAI TO FENGSIEN

Authority : H. R. Davies, Nov. 1906.

There are two water routes :

(A) Via Cha-chiang (or Za-kang) (35¾ miles)

General direction SE. This is the main waterway from Shanghai to Fengsien. The Huang-p'u River is followed up to Cha-chiang, thence creeks are used. A small steam-launch runs every other day as far as Chang-chia-ch'iao at mile 25½, going thence through the northern part of Sinchang to

Nanhwei (Nên-wei-yüen) and returning from Nanhwei the next day. This launch tows one boat (or occasionally two) as far as Sinchang, but cannot tow boats from there on to Nanhwei, probably owing to sharp bends.

There is nothing to prevent launches from running between Sinchang and Fengsien. The creek is tidal as far as Sinchang. From here a slight current sets towards Fengsien. The width of the creek averages from 15 to 30 yds.

The least depth at low water in November is 4 ft.; this is between Chang-chia-ch'iao and Sinchang. In the northern channel from Chang-chia-ch'iao to Sinchang 5 ft. would be the minimum depth, but at Sinchang in the cross-creek which joins the northern channel to the southern channel there is only 4 ft., and there are two bad bends, so that there is no advantage in taking the longer northern channel. Average depth of the route between Cha-chiang and Fengsien is 5–6 ft. at lower water in November.

All these depths would be 2 ft. greater in summer floods.

Bridges across the creek are numerous, averaging about three to every 2 miles. Most of them can easily be passed by a boat with a height of 10 ft. above the water. The lowest bridges are Chang-chia-ch'iao at mile $29\frac{3}{4}$, $9\frac{1}{2}$ ft. (not to be confused with the other Chang-chia-ch'iao at mile $25\frac{1}{2}$), and a bridge at mile $33\frac{1}{2}$ ($\frac{1}{4}$ mile short of T'ou-ch'iao), $8\frac{1}{2}$ ft. These heights would be 2 ft. less in summer floods.

The average breadth of span of bridges is 16 to 20 ft., the least is 14 ft. at Ts'ai-chia-ch'iao, at mile $31\frac{1}{2}$.

Towing from the bank would be practicable for most of the way, with occasional interruptions from unbridged side-creeks, but for about $1\frac{1}{2}$ miles beyond Sinchang it would be difficult, owing to the large number of these unbridged creeks.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). Route starts from Custom-house jetty up the *Huang-p'u River.* The latter varies from 400 to 700 yds. in width, and is nowhere less than 20 ft. deep.

miles

For detailed description as far as Cha-chiang see Route 3 A.

15¼ **Cha-chiang** (or Za-kang or Za-kang-k'ou), village (40 houses), lies ¼ mile up a side-creek, here 70 yds. wide. Direction E.

Creek soon narrows to 40 yds. width. Banks not very good for towing, as unbridged side-creeks are numerous up to mile 16¾. After this, towing is easy.

18½ **Lu-chia-hui** (Lu-ka-wei), village (200 houses), chiefly shops and inns. Supplies obtainable.

From other end of village, a creek, said to be navigable, goes off to l. to Chowpu, P.

21½ **Li-ting,** village (25 houses).

23¼ **Hang-t'ou,** village (200 houses), chiefly shops and inns.

Creek to l. to Chowpu, said to be only passable for small cargo-boats.

25½ **Chang-chia-ch'iao** (Tsang-ka-chiao), 12 houses. Just beyond this the creek divides into two. The right-hand branch is the most direct and has most depth of water.

Going by the left-hand creek entails passing by a side-creek through Sinchang with a depth of under 4 ft. in November.

26 *Yung-hsing-ch'iao*, a three-span stone-slab bridge with stone piers. This is the lowest bridge between Cha-chiang and Sinchang. In November bottom of roadway is 10½ ft. above water ; in summer floods it would be 8½ ft. Depth of water here in November 4½ ft. ; this is the shallowest place between Cha-chiang and Fengsien.

27½ **Sinchang,** P. (Sing-sang-tsêng), a prosperous market town of 500 or 600 houses, chiefly shops. Good supplies obtainable.

From here a creek goes to Nanhwei, along which a steam-launch runs.

miles

From here till mile 28¾ towing from the bank would be difficult, owing to numerous unbridged side-creeks. General direction of route alters here from E. to S.

28 *Hui-chou Guild House*, a big building on the l. bank. Here a creek turns off to the l. and meets the Sinchang–Nanhwei creek. The present route turns sharp to the r.

28½ **Nio-wang-ch'iao.**
A creek to the l. to Ta-tên, said to be navigable for big boats.

29¾ **Chang-chia-ch'iao** (Tsang-ka-chiao), 4 houses. Not to be confused with village of same name at mile 25½. Three-span stone bridge, 9½ ft. from bottom of bridge to water, with 4½ ft. depth in November.

30 **Pu-chang-chia-ch'iao** (Pu-sang-ka-chiao), small village. Bridge same as last.

30¾ *Yang-chia-tang*, a creek to the l., said to be navigable for big boats to Ta-tên.

31½ **Ts'ai-chia-ch'iao** (Ts'a-ka-chiao), 25 houses. Stone-slab bridge of one span, 14 ft. across ; this is the narrowest bridge on this route.

32¼ Big creek to l.

32¾ **Êrh-ch'iao** (Ni-chiao), 15 houses.
Creek to r. to T'ai-cha-ch'iao (T'a-za-chiao).
Just beyond village three-span wooden bridge 9½ ft. high. Centre span can be lifted if necessary.

33½ Three-span stone-slab bridge 8½ ft. above water. This is the lowest bridge on this route. Height would be only 6½ ft. in summer floods.

33¾ **Towkiao,** P., village of 200 small houses. A creek to the l. here.

35¾ North Gate of **Fengsien,** P., an official walled city of *hsien* class, containing 500 houses. Very poor place, but some supplies obtainable. Surrounded by good waterways. Five miles from the sea, with no water communication with it. (See *Gazetteer*.)

(B) Via P'u-hsing-ch'iao (32¼ miles)

General direction SE. This route follows the Huang-p'u River up to P'u-hsing-ch'iao (¼ beyond Cha-chiang Creek); thence along various creeks. It is 3 miles shorter than Route A, but owing to sharp bends in the part between P'u-hsing-ch'iao and Shên-hsiang-ch'ien, especially near Chin-hui-ch'iao, it is not so suitable for launches, though it would not be impossible to get launches drawing 3½ ft. along it, even at low water in November. At Shên-hsiang-ch'ien the route joins the main creek which connects Nankiao Ku with Fengsien.

The creek is tidal as far as Ch'ing-ts'un-chiang. Beyond this there is a sluggish current running from Fengsien.

The width of the creek varies from 10 to 15 yds.

The least depth at low water in November was 4 ft., shoaling to 3 ft. at the sides, near Chin-hui-ch'iao at mile 17¾, where the channel is 7 yds. wide. At Yi-ts'êng-po, mile 22½, there was also only 4 ft. of water.

Average depth of the water between P'u-hsing-ch'iao and Fengsien is 5–6 ft. All these depths would be 2 ft. greater in summer floods.

Bridges are numerous, averaging three to every 2 miles. The lowest is 11 ft., at Chang-ju-ch'iao, at mile 31; this would be 9 ft. in summer floods. This bridge also has the narrowest span of any bridge on this route, viz., 16 ft.

Towing from the bank would be practicable throughout, but owing to unbridged side-creeks some delay would be caused in places, especially (1) from P'u-hsing-ch'iao, at mile 15½ to Hui-min-ch'iao at mile 17¼; (2) from beyond Shên-hsiang-ch'ien, at mile 23¾, to near Fang-tun-ch'iao, at mile 26¾.

miles	
0	**SHANGHAI.** From Custom-house jetty up the *Huang-p'u River.* For detailed description as far as P'u-hsing-ch'iao see Route 3 A.

miles

15½ **P'u-hsing-ch'iao,** village (40 houses), ¼ mile up a creek which runs into Huang-p'u River just beyond the *Cha-chiang* (or Za-kang) Creek. Direction S.

17¼ **Hui-min-ch'iao** (Wei-ming-chiao), 30 houses.

17¾ **Chin-hui-ch'iao** (Ching-wei-chiao), market village (120 houses); small supplies. Depth near here 4 ft., with channel 7 yds. wide, shoaling to 3 ft. at the sides.

19 **Hsing-ch'ang-ch'iao** (Hang-sang-chiao), 20 houses, on r.

20¾ **Hsü-li-ch'iao** (Si-li-chiao), 60 houses.

21½ **Tu-chia-ch'iao** (Tu-ka-chiao), 10 houses.

22½ **Yi-ts'un-pa** (Yi-ts'êng-po), 20 houses. Here creek makes a sharp turn to the l.

Another creek off to the r. goes to Nankiao Ku.

Depth here 4 ft. in November.

23¾ **Shên-hsiang-ch'ien** (Sêng-hang-sien), village (60 houses). Sharp turn again to the l., and direction becomes E. along the creek that connects Nankiao Ku with Fengsien.

25¼ **Yüan-hsien-ch'iao** (Nüen-sien-chiao), 6 houses on l.

26¾ **Fang-tun-ch'iao** (Fang-têng), 6 houses. Five creeks meet here.

A creek to the r. said to go to Chin-shan-hsien.

27¾ **Ch'ing-ts'un-chiang** (Ts'ing-ts'êng-kang), a small market town (300 houses). Fair supplies. Shops chiefly for sale of food. Town stretches along banks for more than ½ mile.

From other side of town creek to l. said to go to T'a-cha-ch'iao.

30¾ **Nan-kao-ch'iao** (Nên-ko-chiao), market village (200 houses); some supplies. Creek makes a sharp turn to r. and sharp turn to l. again.

31 **Chang-ju-ch'iao** (Sang-sü-chiao), 10 houses. Bridge 11 ft. above water in November, 16 ft. span.

32¼ West Gate of **Fengsien,** P., walled town. (See *Gazetteer.*)

ROUTE 3

SHANGHAI TO KASHING (CHEKIANG)

Authority: H. R. Davies, Dec. 1906–Jan. 1907.

General direction SW. The Shanghai–Hangchow Railway affords the most direct line of communication between the two cities. Distance by rail 56 miles. (For details see Chap. IX, railway No. V.)

Besides the railway there are various water routes.

(A) Northern Route (63¼ miles)[1]

This route has the advantage of being passable for launches all the year round. It follows up the Huang-p'u River for 30¾ miles, then enters creek to Kashing, leaving Kashan 1 mile to the S. The Southern Route branches off from it at mile 30¾, and rejoins it at mile 54¾.

The route is tidal as far as San-tien, 7¾ miles short of Kashing. There is also a slight current running from Kashing towards Shanghai.

The Huang-p'u River varies from 300 to 700 yds. in width. The creeks followed vary much in width, averaging from 40 to 100 yds. While passing through the village of T'ai-p'ing-ch'iao, near Kashing, the creek is in one place not more than 20 yds. wide.

The depth is sufficient to allow of launches drawing 5 ft. navigating the route all the year. For the greater part of the route the depth very much exceeds 5 ft.

For the first 16 miles the banks of the Huang-p'u slope too gradually to admit of towing from the bank, but after 16 miles, towing is possible throughout, although it is very much interrupted by the constant crossing of unbridged side-creeks, as there is no road along either bank.

[1] According to the War Office MS. map of South Kiangsu, the distances have been underestimated especially between Ch'ing-liang-an and Fêng-t'ung-ch'iao.

The lowest bridge in the route is a three-span stone-slab bridge at the eastern end of T'ai-p'ing-ch'iao, at mile 61¼; this is 13 ft. high in winter, and would be 10 ft. high at highest summer floods.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). Starting from the Custom-house jetty up the Huang-p'u River. Average width of river at first 500 to 600 yds.
3	*Arsenal Creek*, or Pa-lien-ching, going off to l. to Chwansha (Ts'êng-sho-t'ing) P. T., is passable for boats of 3 ft. draught.
4½	Creek to the r. to Sikawei and on to Sungkiangfu ; not always passable for boats drawing 3 ft. (see Route 6 B).
6½	A creek to the l. to Yang-ssŭ-ch'iao.
8	A creek to the r. to Chang-ch'iao (Zang-chiao).
11½	**Tangkow** (Tang-k'ou-ts'êng, or Tsou-p'u-tang) P., a growing town on l. bank.
	Here a creek goes off to the l. to Chowpu, passable for launches when the water is high.
13½	**Tukiahang** (Tu-ka-hang), P., 25 houses, on l. bank.
	A creek for small boats from here to the l. to Nanhwei.
15¼	**Cha-chiang** (Za-kang), village (40 houses), ¼ mile distant on l. bank.
	A creek to the l. here, to Nanhwei and Fengsien. Launches run to the former : see Route 2 A.
	The river bends sharply to the W. here.
	300 yds. further on a creek to the l. through P'u-hsing-ch'iao to Fengsien : see Route 2 B.
16¾	**Pai-miao** (Pa-miao), small village on l. bank.
	A creek, said to be passable for large boats, goes off from here to the l. to Nankiao Ku.
	The river is still 500–600 yds. wide.
18½	**Minhang,** P., market town (500 houses) on r. bank. Large red temple at northern end of town.
20½	**Sha-chiang-shih** (Su-kang-ssŭ), 12 houses, on r. bank.

miles	
	A creek to the r. here to Mao-ch'iao, said to be passable for big boats.
24	Creek to the r., said to lead to the Sikawei creek, and to be passable only for small boats.
24¾	**Tê-shêng** (Tê-sêng), 25 houses, with *likin* station on r. bank.
	Creek to r. to Wo-yang-ch'iao.
25¾	Creek to r. to Wo-yang-ch'iao, said to be passable for small boats only. River has narrowed to 350 yds.
28¼	Creek to the r. through Ta-t'ieh-ch'iao to Sungkiangfu.
	Creek to the l. to Chang-tsê-chên (Tsang-sê-tsêng).
29¼	Few houses on r. bank.
	Mi-shih-tu (Mi-ssŭ-tu), village of few houses on r. bank. The main creek to Sungkiangfu goes off from here to the r.: see Route 6 A.
29¾	Creek to r., up which launches run about 1 or 2 miles to Hsiao-chiao (Siao-ko), from which place small boats connect with the West Gate of Sungkiangfu: see Route 3 D. There is no village at Hsiao-chiao; it is the name of a bend in the creek.
30	A wide creek goes off to the r., said to lead to Chang-ch'iao (Zang-chiao), 2 miles W. of Sungkiangfu.
30¾	The route turns sharp to the r.
	A creek going straight on leads through Kashan to Kashing, and is the route for launches to Kashing, when the water is high: see Route 3 B. A branch of this creek also leads to Pinghu: see Route 3 C.
32½	**T'a-chiang** (T'a-kang), village (20 houses) and *likin* station on r. bank.
	A small creek from here to the r. towards Sungkiangfu.
	The river is still 200 yds. in width.
33½	A creek to the r. front, said to lead to Chukiakio. A creek to the l. to **Huang-ch'iao-chên** (Wang-chiao-tsêng), 1 mile off.

miles	
34¾	**Li-wu-shê** (Li-ung-so), 15 houses. The route turns sharp to the l. and narrows to 100 yds.
	A creek going straight on forms the launch route through Pingwang to Huchowfu : see Routes 4 A and 1 B.
35½	**Wu-shê** (Ung-so), 30 houses, on l. bank ; ferry.
	In this neighbourhood the Shanghai-Hangchow Ry. crosses the creek.
36	The route turns to the l.
	A wide creek goes off to the r., said not to be navigable far for big boats.
36½	A creek to r., said to lead to **Liu-tiao-wan** (Lo-tiao-wän), 1 mile off.
37¼	**Fên-wu-t'ou** (Fêng-wo-tou), 10 houses, on r. bank.
38½	Creek to l. front, said to lead to Fengking.
	The main creek narrows to 50 or 60 yds.
39¾	**Lin-chia-t'ang** (Lin-ka-tang), 50 houses, on r.
40½	**Tu-chia-ts'un** (Tu-ka-ts'êng), village of 40 houses 200 yds. off on r. bank.
42¼	Creek to l., said to lead to Fengking.
44¼	Creek turns to the r. into village of **Ch'ing-liang-an** (Ts'ing-liang-ên), 25 houses and large number of brick-kilns.
	Sharp turn to the l. here.
45½	Route turns sharp to the r.
	A creek goes off to the l. to Fengking.
(?) [1]	**Chiang-ho-pêng** (Kang-wu-pang), 40 houses.
47¾	Creek to l., said to lead to North Gate of Kashan, and to be passable for small boats only.
	Ch'ien-ching (Ts'ien-ching), 30 houses, on r. bank.
48	The creek turns sharp to the l. : width here, 80 yds.
	Another creek goes off to the r., said to lead to Sitang and eventually to Soochow.

[1] According to the War Office MS. map, the distance between bends at mile 45½ and mile 48 is 4½ miles instead of 2½ miles. According to the same map Chiang-ho-pêng is about 3½ miles distant from bend at mile 48.

miles	
49¼	Route turns sharp to the r. A creek continues straight on to N. Gate of Kashan.
49¾	**Fêng-t'ung-ch'iao** village (15 houses) and three-arch stone bridge across the creek.
50¼	Three-span stone-slab bridge.
51	**Kuan-yin-ch'iao,** village (20 houses) and one-arch stone bridge. Large market village of **Tu-yo-lang** (also called Kan-yao) ¼ mile off on the r.
	Here the creek narrows to 25 or 30 yds.
51¼	Route enters a creek 80 or 100 yds. wide, and follows it to the left.
	To the r. it is said to lead to Lu-ch'ü, and to be passable for big boats.
53	The route turns sharp to the r.
	Another creek leads straight on, joining the direct Kashan–Kashing creek at the western end of the western suburb of Kashan, which it reaches in 1 mile. It is passable for launches, the least depth in January being 5½ ft. at the bridge which crosses it where it joins the direct Kashan–Kashing route. This creek, however, is not habitually used by launches, because when the water is low they cannot get on to the city of Kashan. Passengers from Kashan are brought in boats by this creek to meet the launches at the junction with the present route.
53½	**San-ching-chiang** (Sän-ching-kang), 25 houses and one-arch stone bridge.
54¼	Route turns sharply to the l. Another creek goes off to the r.
54¾	Passing a half-ruined temple and a big tree on the r., enters the direct Kashan–Kashing creek (Route 3 B) and turns to the r. along it.
55½	**San-tien** (Sän-tien), village (30 houses) and five-span stone-slab bridge.
	A bridged creek to the r., said to lead to Yang-miao-chên.

miles

57¼ **Kao-ti** (Ko-ti), 10 houses. A creek to the r., said to lead to Yang-miao-chên.

59 **San-chien-t'ang** (30 houses).

59¼ A creek to the r., said to lead to Yang-miao-chên.

60 **T'ang-hui** (Tang-wei), market village (350 houses) on r. bank. Just before entering village, the creek in one place is narrowed by dams to a width of 10 yds. This channel is said to be closed at night as a protection against thieves.

In the middle of the village a creek crossed by a one-arch stone bridge goes off to the r., said to lead to Lili, and to be passable for big boats.

61¼ **T'ai-p'ing-ch'iao** (T'a-ping-chiao), market village (150 houses). Three-span stone-slab bridge at entrance to village. Height above water, 10 ft. at highest summer floods, 13 ft. in winter. Creek narrows to 20 yds. here.

In middle of village a bridged creek goes off to the r., and is said to lead to Grand Canal.

61¾ *Ch'iu-ching-ch'iao* (Ts'iu-ching-chiao). One-arch stone bridge.

A creek, not passable for launches, goes straight on here towards the North Gate of Kashing.

The route turns to the r.

62¼ Enter the Grand Canal at village of **Ti-ssŭ-yüan** (25 houses), opposite parade ground (see Route 1 A, mile 142½). Turn to the l. down Grand Canal, passing Catholic Mission and Custom-house on the l.

63¼ **KASHING,** P. T. RS., large walled city, abundant supplies (see *Gazetteer*). Route ends at North Gate.

(B) Southern Route (63¼ miles)

This route is only passable for launches when the water is high. Water of sufficient depth is usually found in the

autumn and in part of the summer. When passable it is preferred by the launch companies to the Northern Route, because it passes through Kashan. It is always passable for boats drawing 3 ft.

The route is tidal as far as the East Gate of Kashan, and becomes tidal again for a short distance from a point a mile or two beyond Kashan, up to San-tien, $7\frac{3}{4}$ miles short of Kashing.

There is also a slight current from Kashing towards Shanghai.

The least width is 15 yds. while passing round the moat of Kashan.

The depth is sufficient all the year round for launches drawing 5 ft. up to Chang-ching-hui at mile $48\frac{3}{4}$, and again from the bridge in the western suburb of Kashan at mile 53 on to Kashing. It is, therefore, only for $4\frac{1}{4}$ miles, and when the water is low, that it is too shallow for launches. The shallow places (measured in January 1907) were Chang-ching-hui bridge, 4 ft. at low tide ; near East Gate of Kashan, 4 ft. at low tide ; near West Gate of Kashan, 4 ft. ; at bridge in western suburb of Kashan, 3 ft. The stretch of 3 miles from Chang-ching-hui nearly to the East Gate of Kashan, has 6 ft. and more at low tide.

Towing from the bank is not possible for the first 16 miles of the Huang-p'u River owing to the gentle slope of the banks. After 16 miles towing is possible, but would be much interrupted owing to unbridged side-creeks. There are roads on the banks only from mile $35\frac{3}{4}$ to Chuking at mile $37\frac{1}{4}$, and from the further end of Fengking at mile $45\frac{1}{2}$ to Kashan at mile $51\frac{3}{4}$.

The lowest bridge is a three-span stone-slab bridge at the eastern end of T'ai-p'ing-ch'iao at mile $61\frac{1}{4}$ (Route 3 A) : this is 13 ft. above water-level in winter, and 10 ft. at highest summer floods.

Between Fengking and Kashing the Shanghai–Hangchow Ry. is never more than a few miles away from the creek.

miles

0 **SHANGHAI.** From Custom-house jetty up the *Huang-p'u River.*

For details up to mile 30¾ see Route 3 A.

30¾ Routes 3 A and B divide. Route 3 A and route to Pingwang (see Route 4 A) turn westward.

31¾ **T'un-lai-miao** (T'êng-lei-miao), village (60 houses) on r. bank; distillery on l. bank.

33½ **Wang-ch'uan-tu** (Mang-zên-tu), 40 houses, on r.

34 A creek 150 yds. wide goes off to the l., the launch route to Pinghu (see Route 3 C). The creek followed narrows to 100 yds.

35¾ Creek turns sharp to the l. From here a road runs down the r. bank, but stops at Chuking.

37¼ **Chuking** (Tsu-ching), P., market town (800 houses) on left bank. The magistrate of Chin-shan-hsien lives here. The creek turns sharp to the r. again.

38¼ Ferry. Road begins again down r. bank, but ends at Mao-ch'iao.

40 **Mao-ch'iao** (Mo-chiao), village (12 houses) and few little shops on r. bank.

Just beyond this, small creeks go off to the l. front and r. front, the former leading to Hsing-t'a.

The main creek then narrows to 40 or 50 yds. Least depth at low tide in winter 7 ft.

44½ **FENGKING,** P. RS., large market town (1,000 houses) on r. bank. A small creek runs on into the town, but the main creek turns to the l. just short of the town. Just after turning this corner is the stopping-place for launches on r. bank. Launches run here daily from Shanghai all the year. The boundary between Kiangsu and Chekiang provinces is a bridge in the middle of Fengking, the town being half in one province and half in the other.

45½ The creek touches the other end of Fengking and turns to the l. It narrows here to 20–30 yds. in places.

miles

From here on to Kashan a road follows the r. bank of the creek.

48¾ **Chang-ching-hui** (Tsang-ching-wei), 30 houses, on l. bank, and one-arch stone bridge across creek. This is the limit in winter for launches drawing more than 4 ft., as the water at this bridge is 4 ft. deep at low tide, 5 ft. at high tide.

After the bridge at Chang-ching-hui the water at once deepens again to 6–10 ft.

50¾ **KASHAN,** P. T. RS., a walled city of 1,800 houses (see *Gazetteer*). The E. suburb begins here on the r. bank.

51 One-arch stone bridge. Houses now on both sides of creek, but principal street on r. bank.

51½ One-arch stone bridge. Here the water shallows to 4 ft. at low tide in winter, 5 ft. at high tide.

51¾ From the East Gate turn to the l. along the moat. The route to the r. round by the North Gate is shallow. After passing the SE. corner of the city, the water deepens again to 6 ft. in winter. The tide is not felt beyond the East Gate.

52¼ Passing under a one-arch stone bridge at the South Gate.

52¾ From the West Gate turn to the l. away from the city through a suburb.

53 A creek to the l. front, said to lead to Tung-cha-k'ou.

Main creek is crossed by a one-arch stone bridge ; 3 ft. depth of water here in winter. Beyond this the creek deepens and becomes passable for launches again.

200 yards beyond this, a bridged creek passable for launches goes off to the r., and meets the northern Shanghai–Kashing launch route (Route 3 A) in 1 mile.

Suburb ends here.

54¾ The northern launch route joins in from the r. just short of a small black temple on the r. bank.

For details see Route 3 A, mile 54¾.

63¼ **KASHING,** P. T. RS., large walled city (see *Gazetteer*). Route ends at North Gate.

(C) Via Pinghu (75 miles)

This is the main launch route from Shanghai to Pinghu, up to which town it is passable for launches of 5 ft. draught all the year round. It follows up the Huang-p'u River for 30¾ miles, and then goes by creeks which average 60 yds. in width. The least width is 20 yds. The creek is tidal all the way to Pinghu. There is also a slight current from Pinghu towards Shanghai.

Beyond Pinghu the route is not used by launches, as there is not sufficient depth. It is navigable for boats drawing up to 2½ or 3 ft. Its least width is 10 yds. close to Kashing, but for most of the way it is from 40 to 80 yds. wide. Its least depth is at Tung-cha-k'ou, from 2½ to 3 ft. at low winter-level. The average depth is considerably more than that. The creek is not tidal, but has a sluggish current from Kashing towards Pinghu.

Towing from the bank is not possible for the first 16 miles of the Huang-p'u River owing to its gently sloping banks. After 16 miles, towing is possible as far as mile 45¼, but would be much interrupted by unbridged side-creeks. From mile 45¼ to Pinghu towing is impossible owing to mulberry trees planted close down to the water's edge on both sides. Beyond Pinghu towing is practicable almost throughout, being only interrupted by houses while passing through the suburb of Pinghu, and at Tung-cha-k'ou.

There are no bridges low enough to cause any difficulty to boats.

miles	
0	**SHANGHAI.** From Custom-house jetty up the *Huang-p'u River*.
	For details up to mile 30¾ see Route 3 A.
30¾	From here Route 3 A goes off to r.
31¾	**T'un-lai-miao** (T'eng-lei-miao), village (60 houses) on r.
34	Route turns sharp to l., Route 3 B continuing by a creek straight on.
	Width 100 to 150 yards.

miles	
35½	**Chüeh-ch'ai-tu** (Chüeh-za-tu), few houses on each bank ; ferry.
36	**CHUKING,** P., market town (800 houses) 1 mile away on r., with small creek leading to it.
37½	Sharp turn to r. Width, 80 to 100 yds.
37¾	**Sha-hua-tao** (So-hou-tao). The creek divides into two branches which meet again in ½ mile.
40	Creek 60 yds. wide to l., said to narrow soon and to be passable only for small boats to Sintai. This creek is said to form the *Kiangsu–Chekiang* boundary.
	Main creek about 60 yds. wide here.
40¾	**Shui-p'u-t'ang** (Ssŭ-p'u-tang), timber dépôt on l. ; ferry.
42½	**Lung-t'ou-ho** (Lung-tou-wu), village of 25 houses on r. ; ferry.
44	**Mao-chia-yü** (Mo-ka-yü), village (15 houses) on both banks ; ferry.
45¼	**Sintai** (Sing-ta-chên), P., market town, said to contain 500 houses, about 1 mile away to r.
	Creek to l. said to be passable for small boats to Pinghu.
	From here onward towing becomes impossible owing to mulberry trees planted close to the water on both banks.
46	**Wang-tun-fang** (Wang-têng-fang). Ferry and scattered houses.
48¼	**Nan-chang-tou** (Nên-tsang-tou). Ferry. Village close to l. bank.
	A creek goes off to the l. front, said to be a round-about way to Pinghu for small boats.
49¾	Creek comes in from r., said to come from Kashan.
	The route turns sharp to l. and creek narrows to 30 or 40 yds.
51	**Chao-chia-miao** (So-ka-miao), village (15 houses) on both banks ; ferry.

miles

52 **Pai-t'ang-pêng** (Pa-tang-pang), village (15 houses) on l.; ferry.

53 **Wu-wang-ch'iao,** village (12 houses) on l.; ferry. Remains of a broken bridge.

54¼ **Yi-chia-yü** (Yi-ka-yü), village (50 houses).

A creek from l., crossed by stone-slab bridge.

Main creek has, for a short distance, narrowed to 20 yds., but here opens out to 150 yds.

55¼ **PINGHU,** P. T., walled city of 1,200 houses (see *Gazetteer*). The route reaches the three-arch stone bridge near the N. end of the eastern suburb. Launches and most of the boats stop here.

From Pinghu two creeks lead to **Chapu,** P. T., a seaport for junks. The more direct creek, 8 miles long, is navigable only by boats of not more than 3 ft. draught. The longer route, 10 miles long, has nowhere less than 5 ft. of water at its lowest. For further details see Military Report on Chekiang.

57½ Boats start from near the *West Gate* of Pinghu by a creek which soons widens to about 40 yds., with a straggling suburb along the r. bank. General direction W.

58 Three-arch stone bridge. Here the suburb ends. Towing-path from here along r. bank.

59¼ A creek goes off to the l., said to lead to Haiyen.

64¼ **Sinfeng,** P., market village (500 houses) along r. bank; supplies obtainable. At the entrance to the village is a fine one-arch stone bridge called *Têng-yün-ch'iao*, with large stone abutments; in the middle of the village is another bridge, and beyond the farther end of it a third.

67 *Chiao-shan-mên-ch'iao* (Tsiao-sän-mêng-chiao), three-arch stone bridge. Towing-path crosses to l. bank.

69¼ **Shih-pa-li-ch'iao** (Ssŭ-pa-li-chiao), 20 houses, on both banks, with three-arch stone bridge.

70¼ **Yang-chia-ts'un** (Yang-ka-ts'ên), village (40 houses)

miles	
	on r. bank. The creek about here has an average width of 60–80 yds., occasionally widening out to 150 yds. or more.
73¼	**Tung-cha-k'ou** (Tung-sa-k'ou), market village (500 houses); supplies obtainable. Just before reaching the village the creek widens out to 250 yds.
	A creek from Kashan comes in from the r. rear.
	The creek narrows again in the village, and the road along its bank crosses by bridge in the middle of the village to the r. bank. The creek here has sometimes only 2½ ft. to 3 ft. of water.
73¾	A wide creek goes off to Kashan and Shanghai.
74½	A creek goes off to the left to Nên-yen.
	Here the creek narrows to 10 yds. in width.
75	**KASHING,** P. T. RS., large walled city (see *Gazetteer*). Route ends at East Gate.

(D) Via Sungkiangfu (about 67 miles)

This alternative route is not to be recommended, as it is not passable for launches, and in places at low tide in winter there is not more than 1 ft. of water.

For detailed account see Route 6 B.

miles	
0	**SHANGHAI.** From Custom-house jetty up the *Huang-p'u River.*
29½	**SUNGKIANGFU,** P. T. RS., walled city of 2,000 or 3,000 houses (see *Gazetteer*). The route enters moat at North Gate. Thence it continues by small creeks via W. Gate, and turns W.
30¾	Route turns S.
32½	*Hsiao-chiao* (Siao-ko). Creek widens and deepens, and is used by launches running between Shanghai and Kashing (see Route 3 A).
33½	Route joins the northern route to Kashing (see Route 3 A, mile 29¾ onward).
67	**KASHING.**

ROUTE 4

SHANGHAI TO PINGWANG

Authority: H. R. Davies, Feb. 1907.

General direction WSW. There are alternative water routes:

(A) Via Lili (67½ miles)

This is the direct route from Shanghai to the market town of Pingwang, which lies on the Grand Canal between Soochow and Kashing. It is regularly navigated all the year round by launches drawing 4 to 5 ft.

The route follows up the Huang-p'u River and branches off at mile 34¾ from the northern route to Kashing (see Route 3 A). The last 14 miles into Pingwang are through a continuous succession of lakes.

The route is tidal as far as Chia-ching-chiang at mile 46½. There is also a moderate current running from Pingwang towards Shanghai.

There are no bridges.

There is no road along either bank of any part of this route.

Towing from the bank is impracticable for the first 16 miles of the Huang-p'u River, owing to the gentle slope of the banks. After mile 16, towing would be possible till the lakes were reached, but it would be much interrupted by numerous unbridged side creeks.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). From the Custom-house jetty up the *Huang-p'u River.* For detailed description see Route 3 A.
34¾	**Li-wu-shê.** The northern route to Kashing (Route 3 A), goes off to l. Width of creek 200 yds., gradually narrowing to 150 yds. The creek is here called *Yü-si-ching.*

miles

36½ **Chu-ch'iao** (Tsu-chiao), village, 40 houses, on l.; ferry. In this neighbourhood Shanghai–Hangchow Ry. crosses the creek.

41¾ **Yo-chia-pêng** (Yo-ka-pang), village (15 houses) on l.; ferry. Creek has narrowed to 100 yds.

43 Province boundary. A small stream forms the boundary between Kiangsu and Chekiang, the latter province being now entered.

43½ **Ch'ih-chia-pêng** (Ssŭ-ka-pang), 25 houses, on r. bank. The creek has narrowed to 60 yds.

44½ **Yü-hui** (Yü-wei), 40 houses, on both banks.

Creeks go off to the r. to Chukiakio and to the l. to Kashan.

A lake called *Tung-ch'ien-t'ang* (Tung-sien-tang) is passed on the l. before entering the village.

45¼ The *Yeh-t'ang* is passed on the l.

46¼ **Chia-ching-chiang** (Ka-ching-kang), a long-shaped village (80 houses), chiefly brick kilns, on l. bank. From here onwards the creek is not perceptibly tidal.

46¾ **Lu-chia-chiang** (Lo-ka-kang), 20 houses, on r. bank. Just before reaching it, route turns to the l.

Creek goes off to the l. to Ting-chia-cha (Ting-ka-za).

47½ Route enters the *Sitang Lake* and crosses it.

48¼ Route leaves the Sitang Lake by a creek.

49 The creek widens for a short distance.

A creek to the r. to Kintseh (Ching-za-tsêng).

49¼ A creek to the l. to Sitang. The route turns to the r. Width 80 yds.

49½ A creek to the r. to Chukiakio.

The route turns to the l. and narrows.

50¾ A creek to the l. to Sitang.

52 The route turns to the r.

A creek goes straight on to Tao-chuang (Tao-tsuang), and a creek to the l. to Sitang.

52¾ Route enters the *Ssŭ-chia-t'ang* (Ssŭ-ka-tang) and crosses it.

miles	
53¼	Route leaves the Ssŭ-chia-t'ang by a creek.
53½	Route enters the *Luhü-t'ang* (or Lu-hsü, or Lu-k'uei, local Lu-ch'ü) and proceeds along it.
53¾	Route leaves the Luhü-t'ang by a creek 100 yds. wide at first.
54¼	Pass the south end of **Luhü Ku** (Lu-ch'ü), P., a market town (600 houses). Just short of Luhü Ku, the provincial boundary is recrossed from Chekiang into Kiangsu.
54½	Route enters the *Fên Hu* (Fêng Wu) and proceeds along it. Launches keep to the north of the small island near its eastern end.
57½	Route leaves the Fên Hu at its western end by a creek 30–50 yds. wide, passing through the straggling village of **Yu-chia-chiang** (Yu-ka-kang), 150 houses, which stretches along the creek for nearly a mile.
58¾	Route enters the *P'u-lu-tang* and proceeds along it.
59½	Route leaves the P'u-lu-tang by a creek 30 yds. wide, afterwards widening to 100 yds.
60¼	After a sharp turn to the r., route enters the *Ho-yeh-tang* (Wu-yeh-tang) and crosses it.
61	Route follows a channel into the *T'ieh-pi-tang* and proceeds along it.
61½	Another channel into the *T'a-tang*.
62¼	Another channel into the *Liu-chia-tang* (Lo-ka-tang). Route proceeds near its northern shore.
62¾	Route turns N. out of the Liu-chia-tang by a creek 80 yds. wide.
63½	Route enters the *Niu-t'ou Hu* and continues near its south shore. Here the market town of **LILI,** P. (800 houses) is passed ¼ mile on the r.
64	Through narrow channel into the *Yang-chia-tang* (Yang-ka-tang) and across it.
	Here the route from Chukiakio to Pingwang joins in from the r.—see Route 4 B, mile 61.

miles	
64¾	**Liu-li-sha** (Lo-li-su), 50 houses, on farther shore of Yang-chia-tang. Route leaves the Yang-chia-tang by creek 40 yds. wide.
65¾	Route enters the *Hsi Hu* and follows it to the l. Here the low-water launch route from Soochow to Kashing is joined. (See Route 1 A, sect. 5, mile 125½.)
66¼	Leave the Hsi Hu by a creek 30 yds. wide.
67	Enter *Grand Canal* and turn up it in north-westerly direction.
67½	**PINGWANG,** P., market town (800 houses).

(B) Via Chukiakio (64½ miles)

This route can be conveniently divided into 2 sections :

(1) *Shanghai to Chukiakio* (38½ miles)

General direction WSW. This is the main water route from Shanghai through Tsingpuhsien to Chukiakio.

It is navigated by launches all the year round, but launches of only 4 ft. draught are used when the water is low. The route follows the Soochow Creek as far as Ssŭ-chiang-k'ou or 'Four-Waters' at mile 26, and then turns southwards by a creek to Tsingpuhsien, 40 yds. in width, increasing to 100 yds. and more after that city is passed.

The only shallow places are :—at the stone bridge in northern suburb of Tsingpuhsien, 4–4½ ft. at lowest winter-level ; at the Small West Gate, 4½–5 ft. ; at the Big West Gate, 5–5½ ft.

The creek is not tidal after it leaves the Soochow Creek at Ssŭ-chiang-k'ou. There is a slight current from Ssŭ-chiang-k'ou towards Tsingpuhsien and also from Chukiakio towards Tsingpuhsien. The two currents meet at Tsingpuhsien and run away southwards towards the Huang-p'u River.

The bridge at the Small West Gate of Tsingpuhsien is about 12 ft. high in winter. It is said that in summer floods it is sometimes too low for a big launch to pass.

After passing Ssŭ-chiang-k'ou towing from the bank is practicable throughout, except where interrupted by houses in Paihokang. The towpath leads down the right bank from Ssŭ-chiang-k'ou to Tsingpuhsien and down the left bank beyond Tsingpuhsien.

miles	
0	**SHANGHAI**. From the mouth of the *Soochow Creek*. For detailed description to mile 26, see Route 5 A.
26	*Ssŭ-chiang-k'ou* (Ssŭ-kang-kou or Four-Waters). From here turn sharply southwards by a creek which averages 40 yds. in width. Creek not tidal. Slight current towards Tsingpuhsien. A good towpath, passable for horses, goes down the r. bank.
27¼	**Paihokang** (Pa-wu-kang), P., market village (350 houses), chiefly on r. bank. Two one-arch stone bridges cross the creek in the village
29	**Tutsun** (Tu-ts'êng), P., village (50 houses) on r. bank with few small shops. Creek crossed by one-span stone-slab bridge on stone abutments.
31¼	Large Confucian temple 300 yds. distant on r.
33½	**Ts'ang-t'ou** (50 houses), on both banks.
33¾	**TSINGPUHSIEN,** P., a walled city of 1,000 houses (see *Gazetteer*). North suburb begins here.
34	The creek is crossed by a one-arch stone bridge. Winter depth here sometimes as little as 4–4½ ft.
34¼	North Gate of city. Route turns to the r., going round the W. side of the city by a moat 30 to 40 yds. wide.
34½	Little West Gate. Winter depth here 4½ to 5 ft. Here a creek goes off to the r. through a small suburb to the Soochow Creek and on to Kunshan. It is said to be passable for boats of 3 or 4 ft. draught.
35	Big West Gate. Here the route leaves the city, turning away westward by a creek 100 to 120 yds. wide. The path now goes down the l. bank. The current runs from Chukiakio towards Tsingpuhsien.

miles	
37	A creek to the l., said soon to become smaller. Its mouth is crossed by a three-arch stone bridge.
38½	**CHUKIAKIO** (Tsu-ka-ko), P., a large market town (800 houses), with better shops and more trade than Tsingpuhsien. The creek is crossed here by a five-arch stone bridge. The launch wharf is a little beyond this bridge.

(2) *Chukiakio to Pingwang* (26 miles)

General direction W. This is the direct route between these two large market towns. It is not passable for the ordinary launch drawing 4–5 ft., as the depth in Wan-yü-t'ang is only 3½ to 4 ft., in Chin-tsê, 3 ft., and in the creek which joins the Yu-sang-t'ang and the Niu-t'ou Hu, 4½ ft.

It is always passable for boats drawing 3 ft.

The route passes through a succession of lakes.

Towing from the bank is therefore not practicable for most of the way.

There are no bridges low enough to obstruct traffic.

There is no tide, but a moderate current runs through both lakes and creeks from Pingwang to Chukiakio.

miles	
38½	**CHUKIAKIO,** P. From the 5-arch stone bridge. At about 200 yds. a bridged creek goes off to the l. front, but rejoins the present route at mile 41¾.
38¾	Catholic church on l. bank. Here town ends. The creek is 100 yds. wide.
40	*T'ien Shan*, a hill 50 ft. high on r., with large temple. Creek crossed by one-arch stone bridge. Creek has narrowed to 40 or even 20 yds.
41½	Enter another creek running across at right angles. The route turns to the l. Creek to r. to the *T'ien-shan Hu* (lake).
41¾	Route turns sharp to the r.

miles

Alternative creek from Chukiakio joins in from l. A creek goes straight on to Tsang-lien-tang.

There is a small temple here on l., between the present route and the Tsang-lien-tang creek.

42¼ *Wan-yü-t'ang* (Vän-yü-tang). Route crosses this lake. Average depth 4 ft. Least depth 3½ ft.

42½ The lake is here narrowed by the banks approaching each other.

A creek to r. leads to the T'ien-shan Hu, another to the l. into the Huang-p'u River.

43¾ Reach the other side of the Wan-yü-t'ang. Thence by creek 200–400 yds. wide.

44½ The creek gradually widens into the *Hsi-ts'ên-t'ang* (Si-sêng-tang).

45¼ *Hou-yang Hu* (Hê-yang Wu, lake), joined to the Hsi-ts'ên-t'ang by a narrow neck of water.

45¾ **T'ien-shan-chuang** (Tien-sän-tsang), 30 houses, on further bank of the Hou-yang Hu. Hence by creek 15–20 yds. wide and 5 ft. deep.

46 Enter the *Ta-hua Yang* (Tu-huo, lake), which is crossed.

47¼ **Tung-t'ien** (15 houses) on further shore of the Ta-hua Yang. Here a small lake called *Chou-chia-t'ang* (Tsou-ka-tang) is entered.

47½ Turn to r. out of the Chou-chia-t'ang by creek 30–40 yds. wide.

48 **Kintseh** (Ching-za-tsêng), P., market town (600 houses). The creek turns to l. and runs through the town, being here crossed by two bridges. Depth at the first bridge 3 ft.

49 Enter the *Hsüeh-lo Yang* (Sieh-lo, lake) and cross it.

50 **Chiu-shui-tun** (Ch'iu-ssŭ-tän), 70 houses, on farther bank of the Hsüeh-lo Yang. Hence by creek 40 yds. wide.

50¾ Cross the *Han-lang-tang* (Hên-lang-tang, lake).

51¾ Turn out of the Han-lang-tang by creek 40 yds. wide.

miles

52½ At some brick works a little short of Luhü Ku route turns to r.

A creek also goes straight on through the middle of Luhü Ku, but is narrow and full of boats. It joins the present route in Luhü Ku.

53 **Luhü Ku** (Lu-ch'ü-tsêng), P., a market town (500 houses). Northern end of it is reached after passing under a one-arch stone bridge.

53¼ After passing round the end of Luhü Ku, route turns sharp to the l.

A creek goes straight on to Tungli Ku.

53½ Route enters the *Fên Hu* (Fêng Wu, lake) and proceeds along it.

56½ Route leaves the Fên Hu at its western end by a creek 40–60 yds. wide.

The launch route from Shanghai to Pingwang enters the Fên Hu at the south end of Luhü Ku, and turns out of the lake by another creek ½ mile south of the exit of the present route (see Route 4 A, mile 57½).

57 Route enters the *Mu-kua-tang* (Mo-kuo-tang), and keeps along near its southern shore.

57½ **Wu-shih** (Wo-ssŭ), 25 houses, on farther side of Mu-kua-tang, whence a creek 40–50 yds. wide is entered.

58¼ Route enters the *Lan-ch'iao-tang*, and crosses it.

An alternative route goes off from here to the left front through Lili, rejoining the route in the Niu-t'ou Hu. It is said to be narrow and much obstructed by boats in the town of Lili.

58½ Route passes through a narrow channel into the *Tu-ping-t'ang* and crosses it.

Here a creek goes off to the l. into Lili.

59¼ Route passes through another narrow channel into the *Yu-sang-t'ang* and crosses it.

60 Route leaves the Yu-sang-t'ang by a creek 30 yds. wide passing **Chieh-tzŭ-tu** (Tsieh-tsŭ-tu). Depth 4½ ft.

miles	
	LILI, P., a market town (800 houses), with a Catholic church, is passed ¼ mile distant on l.
60¼	After passing under a stone-slab bridge the creek turns to r.
	A creek goes to l. into Lili.
60¾	Route enters the *Niu-t'ou Hu* (lake) and crosses it.
61	Route passes through a narrow channel into the *Yang-chia-tang*.
	Here route joins the launch route from Shanghai to Pingwang, which passes south of Lili (see Route 4 A, mile 64).
61¾	**Liu-li-sha** (Lo-li-su), 50 houses on farther shore of the Yang-chia-tang.
	Leave the lake by a creek 40 yds. wide.
62¾	Enter the *Hsi Hu* (lake), and follow it along to the l.
	A creek goes straight on across the Hsi Hu, joining the Grand Canal 1¼ miles north of Pingwang.
63¼	Leave the Hsi Hu by a creek 30 yds. wide.
64	Enter the *Grand Canal*. Turn up it in north-westerly direction.
64½	**PINGWANG,** P., market town (800 houses).

ROUTE 5

SHANGHAI TO SOOCHOW

Authority: A. H. Hilton-Johnson, Oct. 1906.

General direction, WNW. The two cities are connected by the Shanghai–Nanking Ry. Distance by rail, 53½ miles (for details, see Chap. IX, railway No. I). There are also two alternative water routes :

(A) Via San-chiang-k'ou (Three-Waters), about 70 miles

This is the main water route by the Soochow Creek. It is tidal to Hwangtu. Average range of rise and fall of tide,

8½ ft. at mouth of creek; average force of tide, 3 miles per hour.

Its average width is 50 yds., and average depth 12 ft.

It is a regular steam-launch route, and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large boats could pass each other practically anywhere.

The country generally is flat and well cultivated, and has a moderately wooded appearance. Much of it is swampy and impassable, especially west of Four-Waters. The banks for the first 10 miles are high enough to prevent any view from boats.

A continuous towpath, passable for animals and wheelbarrows, extends only for a few miles beyond the suburbs of Shanghai; elsewhere it is frequently broken and submerged, and often disappears completely.

The alternative route B runs via Kunshan, and west of that place is connected with the main route by several creeks running N. and S.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). From the mouth of the *Soochow Creek.* Suitable place at which to embark troops on the Soochow Creek, whilst avoiding congestion near its mouth, will be found near, and W. of, the *Markham Road Bridge.*
5	**St. John's College,** on r.
5½	**Fan-hsiang-tu** (Vän-wang-tu). Ferry. This marks approximately the western limit of Shanghai. Hereafter ferries are of fairly frequent occurrence.
7¼	**Chou-t'ai-o-miao** (Tsou-tai-a-miao), 50 houses, on r.
8¾	**Hsin-tu** (Sing-tu). Ferry.
10½	**Chang-chiang-tu,** on l. Ferry.
12	**Yeh-chi-tun** (Ya-chi-tên), mound on l., 40 ft. high, giving good view.
	Creek to r. leads to Kiatinghsien (see Route 7 D).
15	**Chang-chia-chên** (Zang-ka-tsêng), on r.
17	Sharp bend to E.
19¼	**Lung-wang-tu.**

miles

22 **HWANGTU,** P., market town along creek ½ mile to r. (700 houses). Half-mile E. of town on r. bank is a *camp*, about 200 yds. by 40 yds., enclosed by a mud wall 12 ft. high and 2 ft. thick on top, exterior slope ²/₁, surrounded on N., E., and eastern half of S. side by outer earth bank 10 ft. high. Both bank and wall are easily surmountable by infantry, and neither has a ditch that would offer serious obstacle to assault. Country is enclosed on W.; open on N. and E., but broken and offering good cover for attack. The camp was occupied in October, 1906, by about 350 old-style infantry.

From here the country is more level, banks are lower, and extensive view from boats is obtainable, especially to S.

Creek branches off to NE., leading to Taitsang (Route 7 B) and Kiatinghsien (Route 7 D).

26 *Ssŭ-chiang-k'ou* (Ssŭ-kang-k'ou or Four-Waters), formed by the junction of two smaller creeks with the main one. No village.

Creek to l. leads to Tsingpuhsien and Pingwang (see Route 4 B). Creek to r. leads to Waikang (see Route 7 C).

Country very low-lying: extensive marshes border the creek on S. From here country on both banks becomes more wooded.

27½ **Mei-pu-kou,** on r. Direction SW.

29 *Ko-siao-miao* (local name), on l. Direction NW.

30 Creek winds again S. for about 1 mile, then W.

33½ **Sing-ssŭ** (local name), on l. Creek winds N.

35 **Lukiapeng,** P., market town ½ mile up creek to r. (300 houses). From here country is even flatter, and extensive view is obtainable from boats. Three miles W. the creek broadens out for some miles into impassable swamps.

42 *San-chiang-k'ou* (Three-Waters), formed by the

miles

junction of the *Ch'ing-yang Chiang* with the main creek. No village. Route continues W.

Creek to N. leads to Kunshan (see Route 5 B), and to Taitsang (see Route 7 A). From here westwards the creek broadens considerably: submerged banks in mid-stream are frequent, and careful navigation is necessary. For about 2 miles the channel lies some 80 yds. from south bank. Country is very low and often flooded and impassable, especially on S. bank.

43¾ **Chou-hsiang-chên** (Tsou-hang-tsêng), ½ to S. up side creek.

47¼ **Tu-t'ou-ts'un-shih,** ¼ mile on l. on side-creek.

55 Tall tree, situated about ¼ mile inland on l., on E. bank of creek going SSW., is a well-known feature or landmark to all natives of the district, and is named the *Lin-yen-shu* (Ling-ê-zên).

From here a short-cut route proceeds W. via T'ang-p'u.

Submerged banks and shallows are frequent, but there is ample water in the channel at all seasons.

60 The route leaves the Soochow Creek and turns W. and NW. via the *Hu-ti-t'an* (Lake).

60¾ **Chefang** (Ts'u-fang-tsêng), P., on r. near entrance to the Hu-ti-t'an.

61¾ **Kao-tien-chên** (Kao-ti-tsêng), 100 houses, on r.

62¾ Route enters the *Tu-shu Hu* (To-zŭ Wu) and crosses the SW. corner of the lake.

67¼ *Pao-tai-ch'iao* (Po-ta-chiao), a 53-arch bridge about 300 yds. long, multiple arch type, spanning eastern end of a small lake. Largest arch is 80 yds. from northern end of bridge, and is 12½ ft. high and 7 yds. wide at average water-level. At each end of bridge is a *camp* about 100 yds. square, surrounded by an earth bank 9 ft. high at a slope of 1 in 1, with a small ditch and interior banquette. Occupied in October, 1906, by guard of 10 men.

miles

Route turns N. into the Grand Canal.

A by-route by which Soochow city may be avoided goes west from the bridge for 4 miles past Five Arch Bridge (*Wu-lung-ch'iao*, local name, 'Ng-lung-chiao) and the village of **Hsin-kuo-li** (Sin-ko-li), then turns N. via **Hengtang** (Wang-tang), P., and joins the Grand Canal at **Fengkiao Ku,** Fung-chiao-tsêng ; see Route 1 A, mile 97¼). The summer depth and waterway are in some places restricted to 5½ ft. and 4½ yds. respectively, and the headroom under the lowest bridge to about 8 ft.

About 1 mile N. of Fifty-three Arch Bridge on l. is a block of barracks about 200 yds. by 250 yds. with accommodation for 1,500 men. It is surrounded by a brick wall 8 ft. high and 15 in. thick (not built for defence). Good field of fire to N. and S., more enclosed on W. Occupied in October, 1906, by a regiment of the Ch'a-ming-chün.

69½ **SOOCHOW,** P. T. RS. (see *Gazetteer*). Route ends at SE. corner of city. Custom-house and Foreign Settlement on l. Spacious waterway, absence of native buildings and ample dry land accommodation.

This point is in direct water communication with all the city gates.

To the N. creek leads to *Lou Mên* (2½ miles) ; to the W. to *Hsü Mên* (2¾ miles).

(B) Via Kunshan (about 69 miles)

This route is identical with Route A as far as San-chiang-k'ou (Three-Waters), thence proceeds N. and W. via Kunshan. Between these places the creek averages 100 yds. wide and 15 ft. deep, with low banks and intermittent towpath.

The Kunshan–Soochow section is a branch of the Grand Canal. It is non-tidal but has a sluggish current usually flowing E. Average width 30 yds. ; average depth 9 ft. It

is not a regular steam-launch route but is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large boats could pass each other anywhere. The country generally is flat, well cultivated, and has a moderately wooded appearance. Much of it, especially on the N. bank, is below summer water level and liable to floods. W. of Cheni the country is mostly dry and passable. The banks are low, in bad repair, and broken through in many places. A good view is obtainable from boats. There is a towpath throughout, much broken by water in summer ; it is also interrupted by a few unbridged creeks.

The Shanghai–Nanking Railway crosses the creek about $2\frac{1}{2}$ miles N. of San-chiang-k'ou. From Kunshan to Soochow the railway line runs parallel to the creek first on l., then on r., crossing the creek by a bridge about 4 miles W. of Kunshan.

miles	
0	**SHANGHAI.** From the mouth of the *Soochow Creek.*
	For details to mile 42 see Route 5 A.
42	*San-chiang-k'ou* (Three-Waters). Route turns N.
$44\frac{1}{2}$	Railway line crosses the creek.
47	Route turns W.
	Branch E. goes to Taitsang (see Route 7 A).
48	**KUNSHAN,** P. T. RS. (see *Gazetteer*). Route approaches by *East Gate,* thence proceeds either by S. or N. of city to SW. corner, where it enters branch of Grand Canal and goes W.
	The railway station is some distance south of the city.
$51\frac{3}{4}$	**T'ao-sang-ts'un,** on l.
54	Railway crosses to r. of creek.
$55\frac{1}{2}$	**Cheni** (Chêng-i-tsêng), P. RS., market town up creek on r. (800 houses).
$59\frac{1}{2}$	**Weiting** (I-ting), P. T. RS., market town mostly on r. (600 houses).
	Cross *Sha Hu* (So Wu) on the N., a breakwater dividing the lake from the canal.

miles	
65½	**Waikwatang** ('Nga-ku-tang), P. RS., market town on r. (150 houses).
68	**SOOCHOW,** P. T. RS. East suburb. Waterway much congested by boats, timber, and overhanging houses.
68½	*Lou Mên*, northern of two gates in E. wall. It is in direct water communication with all other gates.

ROUTE 6

SHANGHAI TO SUNGKIANGFU

Authority: H. R. Davies, Dec. 1906.

General direction, SW. The Shanghai–Hangchow Ry. connects the two cities. Distance by rail, 22 miles. (For details see Chap, IX, railway No. V.)

There are alternative water routes :

(A) Via the Huang-p'u River (32 miles)

This route is to be preferred to Route B, as it is passable for launches up the Huang-p'u River to mile 29¼. Launches might even reach the southern part of Sungkiangfu itself by going up the creek at high tide. Usually they run up another creek starting at mile 29¾. They stop 1 or 2 miles up the creek at Hsiao-chiao, from which place small boats connect with the West Gate of Sungkiangfu (see Route 3 D). In actual distance Route B is 2½ miles shorter than the present route.

The Huang-p'u River varies from 300 to 700 yds. in width. The creek from the river to Sungkiangfu is from 15 to 25 yds. wide, 3 ft. deep in winter at low tide, and 6 ft. at high tide.

Towing from the bank is not possible for the first 16 miles of the Huang-p'u River, owing to low, gently sloping banks.

After that it is possible, but is somewhat interrupted by unbridged side-creeks.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). Starting from Custom-house jetty up the *Huang-p'u River*. For details see Route 3 A.
29¼	**Mi-shih-tu** (Mi-ssŭ-tu), village of few houses on r. bank. From here turn to the r. up a creek which at first is 25 yds. wide, but narrows to 15 yds. It is too shallow for launches except at high tide.
30¼	A Catholic church at a place called **Têng-chi-pêng,** ¾ mile away on the l. Depth here, 3 ft. at low tide, 6 ft. at high tide.
32	**SUNGKIANGFU,** P. T. RS. (see *Gazetteer*). Route passes under a one-arch stone bridge into the moat of the city between the South Gate and the SW. corner. Moat here 12–15 yds. wide. From here deeper water is found by turning to the l. as far as the West Gate, thence turning to the r., but at low tide there does not seem to be more than 1½ ft. of water in any part of the moat, with 2½ to 3 ft. at high tide. Most of the boats are to be found near the West Gate.

(B) Via Sikawei Creek (29½ miles)

This alternative route is not to be recommended, as it is not passable for launches.

The route goes up the Huang-p'u River for 4½ miles, and then turns up the Sikawei or Hill Creek, which it follows till mile 23, and then turns southward to the North Gate of Sungkiangfu.

The least depth is 1 ft. at low tide in winter near mile 14, with sometimes barely 2 ft. at high tide. Boats are sometimes grounded here waiting for spring tides.

The least width is 7 or 8 yds. at low tide in winter.

Bridges are all too high to cause any difficulty, except the one at mile 5, under which boats over 7 ft. high could not pass at high tide.

Towing from the bank is practicable from mile 5 to mile 23, except when passing through large villages where the houses come down to the water's edge.

Beyond mile 23 towing is somewhat interrupted by unbridged side-creeks.

miles	
0	**SHANGHAI.** From the Custom-house jetty up the *Huang-p'u River* (see Route 3 A).
4½	*Mouth of Sikawei Creek.* Turn up the creek, here 30 yds. wide and 4 ft. deep at low tide, leaving on r. a large red building which is a paper factory.
5	Creek crossed by five-span wooden bridge on road to **Lunghwa,** P. RS. Bridge 7 ft. high at high water, 10 ft. or more at low water.
	The creek soon narrows to 15 yds.
5¾	On reaching the French Sikawei Road the creek turns along it to the l.
7¾	**Sikawei,** RS., village of 50 houses, with observatory and other large buildings of Catholic Mission. From here for some miles the course becomes very winding. Width at low tide, 7 or 8 yds.; at high tide, 10 or 12 yds. Depth in winter 2 ft. at low tide, 4½ ft. at high tide.
	Near Sikawei the Shanghai Loop Line crosses the creek.
11¾	**Hungkiao Ku,** P. (120 houses); small market. A five-span wooden bridge in middle of village.
12¼	**Hsin-ch'iao** (Sing-chiao), 40 houses. Five-span wooden bridge. Between here and Tsipao is the shallowest part of the creek, the depth being 1 ft. in winter at low tide, and 1½ to 2 ft. at high tide. In summer the depth would usually be increased by 1 ft. or more.
15	**Tsipao,** P., market village (400 houses), with a Catholic church. The creek is crossed by three stone bridges in this village.
	Creek here 12–15 yds. wide, and 2 ft. deep at low

miles

tide in winter. Tide beyond this is not felt except at springs.

17 **Hsiao-tu-chên** (Siao-tu-zên), 10 houses, with three-span stone-slab bridge. Depth 2½ ft. at low tide. There is a rise of nearly a foot at spring tides, but ordinary tides do not come up to here.

18 **Chiu-li-miao,** likin (Customs) station of 2 houses.

19 **Lung-tsu-ch'iao** (20 houses), with three-span stone-slab bridge.

19¼ **Wang-t'ang,** village and Catholic church ¼ mile to r. Creek has widened here to 20 or 30 yds. with 5 ft. depth.

20 The present route takes a sharp turn to r., widening out to 100 yds.

A creek goes straight on southwards from here, leading to the East Gate of Sungkiangfu, but it is reported very shallow.

20½ **Szeking** (Ssŭ-ching), P., market town (700 houses) with a Catholic church; good shops. The creek, whilst passing through the town, narrows in places to 25 or 30 yds., and is crossed by three three-arch stone bridges. It widens out to 120 yds. beyond the town.

21½ A little beyond the other end of Szeking, a creek goes off to the l. to the East Gate of Sungkiangfu; it is said to have 3 ft. of water at high tide, but not much more than 1 ft. at low tide. (The tide, though not felt here, is felt again near Sungkiangfu.)

The present route, though about a mile longer, is generally preferred as having deeper water.

23 Passing the small village and Catholic church of **Yang-chia-kung** (Yang-ka-kung) on the r., the creek turns sharp to the l., another creek turning to the r. to Tsingpuhsien and also joining into the Soochow Creek at Hwangtu.

23¼ A creek turns off to the r. to what are known as 'The Hills'; on the top of the highest of these

miles

(325 ft.) is a French Mission observatory called *Zo-se* (Zo-sän).

24½ **Tang-ch'iao** (50 houses), with a broken three-arch stone bridge. The two left-hand arches are constricted by the ruins of the bridge. Only the r. arch is passable ; only 3 ft. depth here.

Another creek turns off here to r. to ' The Hills '.

Just here the creek narrows to 30 yds., but immediately opens out to 150 yds. with 6 ft. depth, then gradually narrows to 100 and then to 70 yds.

27½ **Tu-t'a-pêng** (40 houses), on l. Creek narrows to 40 yds. with 2½ ft. depth.

28½ **Wu-li-t'ang** (Ung-li-tang), Catholic church and few houses on r. Creek has narrowed to 15 yds. with depth of 2½ ft. at low tide. Tide of a few inches here.

29¼ **SUNGKIANGFU,** P. T. RS. (see *Gazetteer*). North suburb begins here.

29½ Enter the moat at *North Gate* of city. Width of moat about 12 yds. Depth 1½ ft. at low tide, 2½ ft. at high tide.

ROUTE 7

SHANGHAI TO TAITSANG

Authorities : A. H. Hilton-Johnson, Nov. 1906 (Route B), Feb. 1907 (Routes A, D and E); H. J. Harding, Aug. 1906 (Route E); War Office Map, Shanghai and Neighbourhood, 1908.

General direction, NW. There are three water routes :

(A) Via San-chiang-k'ou or Three-Waters (54 miles)

This is the main water route. As far as mile 42 it is identical with Route 5 A. Beyond that point the creek is non-tidal, but has a sluggish current flowing south for the first 5 miles.

Average width, 100 yds.; average depth, 15 ft. It is a regular steam-launch route and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large boats could pass each other anywhere.

The country is flat, well cultivated, much intersected by creeks, and has a moderately wooded appearance. Much of it is swampy and impassable.

The banks are low, and a good view from boats is obtainable. The towpath is intermittent only.

The Shanghai–Nanking Ry. crosses the creek about 2½ miles N. of San-chiang-k'ou.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). From the mouth of the *Soochow Creek.*
	For details to mile 42 see Route 5 A.
42	*San-chiang-k'ou* or Three-Waters. Route turns N.
44½	Railway line crosses the creek.
47	Route turns E.
	Branch W. goes to Kunshan (see Route 5 B).
53½	**TAITSANG,** P. (see *Gazetteer*). Route enters W. suburb and continues straight on.
	R. branch goes to Hwangtu (Route 7 B), Kiating-hsien (Route D), and Liuho Ku (Route E).
54	*West Gate.* It is in water communication with North and East Gates via W. wall only.

(B) Via Hwangtu (about 44 miles)

This is the most direct water route, but its utility is restricted. As far as mile 22 it is identical with Route 5 A. Beyond mile 22 the creek is non-tidal, but has a sluggish current flowing SE. Average width 20 yds., average depth 6 ft. It is not a regular steam-launch route, but is navigable in summer for vessels up to 3½ ft. draught and 14 ft. beam (limited by bridges). The length of tow would be greatly restricted by a narrow and very tortuous section of creek 2 miles SE. of Taitsang. In addition to this section, there

are a number of points where large boats would be unable to pass each other. In winter the above section of creek is only 1½ ft. deep in places.

The country is flat and well cultivated, has a moderately wooded appearance, and is much intersected by creeks. Otherwise it is generally dry and passable. Mounds 30–40 ft. high occasionally occur, from the top of which a good view can be obtained. The banks often obstruct the view from boats.

There is a continuous path, passable for animals and wheelbarrows, approximately following the course of the creek, but it is only available as a towpath between Waikang and Ko-lun-ts'un, and beyond Nan-ma-t'ou. Elsewhere no continuous towpaths exist.

The Shanghai–Nanking Ry. crosses the creek at mile 26.

miles	
0	**SHANGHAI.** From the mouth of the *Soochow Creek.*
	For details see Route 5 A.
22	Mouth of *Hwangtu Creek.* Route turns NE.
22½	**HWANGTU,** P., market town, 700 houses ; ¼ mile beyond route turns l.
24¼	**Ying-wang** (30 houses), on l. ; beacon mound *Huo-ning-t'ai* 40 ft. high on r.
25¼	**Tsa-chia-ch'iao** (Tsa-ka-chiao), bridge ; village on r. (100 houses).
26	Railway bridge. Waterway 5 yds.
27½	*Pa-tzŭ-ch'iao,* three-span stone bridge, waterway 5 yds. ; 500 yds. W. is *Yeh-tun* mound, 30 ft. high.
29	**Fangtaichen,** P., market town (200 houses).
	The creek, which from a point 300 yds. SE. runs NE. to Kiatinghsien (4 miles), is navigable for very small boats only.
30½	*Sha-chiang-ch'iao* (Shui-kang-chiao), bridge, waterway 5 yds. Village **Li-chia-pêng** (50 houses), on r.
32	**Waikang** (Nga-kang-tsêng), P., market town (500 houses).

miles	
	From here the main creek to Kiatinghsien goes E. (see Route 7 D).
34¼	**Ko-lun-ts'un** (Ku-lung-tsêng), market town (300 houses).
	Just beyond here the creek divides, the branches rejoining 2 miles from West Gate of Taitsang.
	Route follows branch going r. Branch going l. is shorter, but its navigability is limited by small entrance bridge.
36¾	**Hsin-yung** (Sin-yung), market town on l. (100 houses).
37½	**Wang-p'u-tang** (30 houses), on l. From here creek becomes narrow and very tortuous.
39½	**Nan-ma-t'ou** (No-mu-tei), straggling village on r. (100 houses), continuing across wide creek which is entered near far end of village.
	This creek leads to Liuho Ku and the Yangtse (see Route 7 E). Route turns l.
40¼	*Si-wu-chiao* (local name), wooden bridge, and hamlet on r.
41¾	Mouth of a creek. This is the branch going l. from Ko-lun-ts'un.
	Route turns r.
42¾	**TAITSANG,** P. (see *Gazetteer*). Route enters SW. suburb and turns r.
	Branch on l. goes to Kunshan (8 miles; see Route 7 A).
43½	*West Gate.*

(C) Via Ssŭ-chiang-k'ou or Four-Waters (about 46 miles)

As far as mile 26 this route is identical with Route 5 A. Beyond mile 34½ it is identical with Route 7 B. No details available, but the creek appears to be shallower and less frequented than the alternative described under Route 7 B.

miles	
0	**SHANGHAI.** From the mouth of the *Soochow Creek.*
	For details to mile 26 see Route 5 A.
26	*Ssŭ-chiang-k'ou* (Four-Waters). Route turns r. into narrow creek.
27¾	**Anting** (Ê-ting-tsêng), P. T. RS.
28¾	Creek crossed by railway. Station to W. of bridge.
30	Route turns NW. Creek comes in from S.
32½	Route turns sharply NE.
33¾	**Waikang,** P., ¾ mile E. (connexion with the town not shown on maps).
34½	E. side of town.
	For details from this point see Route 7 B.
46	**TAITSANG,** P. *West Gate.*

(D) Via Kiatinghsien (42 miles)

As far as mile 12 this route is identical with Route 5 A. Beyond mile 30½ it is identical with Route 7 B. The following remarks refer to intervening section only.

The creek is tidal nearly to Kiatinghsien; average force of tide 2½ miles per hour. Average width of creek 20 yds., average depth 6 ft. It is not a regular steam-launch route, but is navigable W. of Kiatinghsien for large launches always, and SE. of that place for vessels up to 3½ ft. draught and 12 ft. beam in summer and at highest tides in winter. The draught is restricted by a bar about ¼ mile long close to Yeh-chi-tun, and the beam by a narrow bridge near the South Gate of Kiatinghsien. There are many points at which two large boats could not pass.

The country is flat and well cultivated, has a well-wooded appearance, and is much intersected by creeks. Otherwise it is generally dry and passable. Only a very limited view from boats is obtainable owing to high banks.

The towpath is intermittent to Nansiang and continuous beyond; passable for animals and wheelbarrows.

miles	
0	**SHANGHAI.** From the mouth of the *Soochow Creek.* For details see Route 5 A.
12	**Yeh-chi-tun** (or Ya-chi-tên). Route turns r. into narrow creek, very shallow for first ¼ mile.
13¾	**Chiang-ch'iao** (Kang-chiao), market town chiefly on r. (400 houses).
17	Railway crosses creek.
18	**Nansiang** (Nên-ziang-tsêng). P. T. RS., straggling market town (5,000 houses). Creek very congested.
22½	**Ma-lu-chên** (Mo-lo-tsêng), market town on l. (100 houses).
23½	**Shih-kang-mên-chên** (Sa-kang-mên-tsêng), market town off l. bank (100 houses).
25¼	**KIATINGHSIEN,** P. (see *Gazetteer*), *South Gate.* Approached through narrow stone pier bridge, 12 ft. waterway. Route turns l. Branch r. goes to East and North Gates, and is usually navigable only in summer.
26¼	*West Gate.* Branch r. goes to North and East Gates. Route turns l., through suburb, waterway shallow and congested. From here creek averaging 30 yds. wide goes WSW. to Waikang.
30½	**Waikang** (or 'Nga-kang), P. Route turns NW. (See Route 7 B.)
42	**TAITSANG,** P., *West Gate.*

(E) Via Liuho Ku (50 miles)

The route can be conveniently divided into three sections:

(1) *Shanghai to Woosung Forts* (11½ miles)

A full description of this section is given in Route 8. The distance is by the shortest route (Route 8 A).

miles	
0	**SHANGHAI.** From the Garden Bridge opposite the **British Consulate.**
11½	**Woosung Forts,** RS.

(2) *Woosung Forts to Liu-ho-k'ou* (17 miles)

General direction NW. Nearly all the way the route follows the Yangtse Embankment or Sea Wall, the height of which varies from 12 to 18 ft. In places where the embankment skirts the water's edge it is protected by rows of stakes, the farthest rows being covered at high water. For a considerable distance alluvial accretions have separated the embankment from the water, in which cases a smaller dike has usually been built close to the shore. Two main creeks cut through the embankment at Shih-tung-k'ou and at Ch'uan-sha-chên, establishing direct communication between the Yangtse and the inland waterways.

A creek runs parallel with the embankment the whole way, collecting drainage from surrounding country.

The road along the top of the embankment is good at all times for walking, though liable to be heavy and overgrown with grass after a period of rain. In good weather cyclists would only have to dismount twice.

It is said that there is no way along the embankment N. of Liu-ho-k'ou (see Route 10, mile 1).

miles	
11½	**Woosung Forts,** RS. From the railway station the route follows a broad metalled road past the Forts Hotel.
12½	**Nan-shih-t'ang Fort** with a jetty. About 500 yds. beyond the fort the road leads to the Yangtse Embankment, along the top of which the route now lies.
13½	**Paoshan** (Pao-sän-yüen), P., a small district town enclosed by a dilapidated mud wall 15 to 18 ft. high, 3 to 6 ft. thick at top, faced with brick. The town is

miles

sparsely inhabited, with open spaces inside the walls. It is close to the embankment, but separated from it by the creek. At N. end of the town, embankment bends W.

14½ **Nien-chia-chai.**

14¾ **Wan-chia-chai.** Embankment bends NW.

15¾ **Pien-chia-chai.**

16 A camp on l.

16¾ **Hou-chang-chai,** a camp on the l.

17 **Shih-tzŭ-lin** (Ssŭ-tzŭ-lin), fort with village 1 mile beyond. Route descends from embankment, crosses creek, and joins broad macadamized road which runs well to the rear of the fort, where route returns to embankment.

18¾ **Yu-chia-chuang.**

19½ *Shih-tung-k'ou* (Sa-tung-k'ou). A creek from Kiatinghsien (about 12 miles W.) and 'coastal creeks' coming from opposite directions meet here and form a fair-sized basin, which discharges into the Yangtse through a narrow sluice-gate in the embankment. Stone-slab bridge across gap at same height as embankment. Very strong current, especially at ebb tide. Zigzag approach through rows of stakes, covered at high water. Some fishing junks. The village close by is marked **Tien-êrh-chai** on the map.

20¼ **Lu-chia-chai.**

22½ **Ch'uan-sha-chên,** a village with about a dozen tea-shops and as many other houses. The embankment here is some distance inland, forming main street of village. Road very heavy after rain.

A narrow creek, coming from Kiatinghsien, cuts through embankment and enters Yangtse here. Straight reach of about ¼ to ½ mile (without bridges) between village and river. Some middle-sized junks.

28½ **Liu-ho-k'ou** (Lou-wu-k'ou). For the last mile the embankment turns inland and runs almost parallel

miles

to the last reach of the *Liu Ho* (Lou Wu). It is shady, and has houses scattered along its foot on the S. side.

The mouth of the Liu Ho (about ¾ mile from village) is opposite Tsungming, and marked on N. bank by a beacon with a wooden watch-tower among trees close by, and on S. bank by an extensive mound rising some 8 ft. above the marshy ground around it. To the west of mound, and on the same bank, a dike 4 to 8 ft. high, bordered with trees part of the way and with a path along it, leads from the Liu Ho to the main Yangtse Embankment. Marshy ground to E., rice fields to W.

The mud at the mouth of the river is quite hard, and there are some patches of shingle beach on N. bank. The Yangtse is shallow for a long way out except where the current from the Liu Ho has made a channel ; this channel runs fairly straight E. by N. from the mouth of the river. There are no stakes round the bay, but extensive mud-flats at low water. Ebb tide runs up to 5 miles per hour. Junks wait for the turn of the tide just inside the mouth of the river. (See map, p. 544.)

(3) *Liu-ho-k'ou to Taitsang* (21½ miles)

General direction W. This is the main water route connecting the sea-coast with Taitsang by the creek known as the Liu-ho (or Lou-wu). It is tidal throughout ; average force of tide, 3 miles per hour ; rise and fall, from 1 to 6 ft. Its average width is 50 yds., and average depth 9 ft. It is a regular steam-launch route S. of Liuho Ku, and is always navigable throughout for vessels up to 6 ft. draught and 16 ft. beam. In practice, however, the passage through the above town is usually almost impossible owing to a block of moored junks. Elsewhere two large boats could pass each other at any point.

The country is flat, well cultivated, and moderately intersected by creeks, and has a well-wooded appearance. Towards the Yangtse creeks diminish in size and number, and for a few miles inland from its south bank the country is passable in all directions for foot and barrow traffic by means of paths. The banks of the creek are usually high enough to prevent any view from boats.

There is an intermittent towpath along the S. bank.

miles	
28½	**Liu-ho-k'ou** (Lou-wu-k'ou).
29	**Liu-ho-hsin-chên** (Lou-wu-sing-tsêng), straggling market town on l. (200 houses). This is the first good landing-place. A navigable creek, crossed by a wooden bridge, passes through the town and joins the Liu Ho.
	The road along S. bank crosses several tidal ditches by rickety wooden bridges.
31½	**LIUHO KU** (Lou-wu-lao-tsêng), P. T., market town (1,500 houses), on both banks of the river, but houses more numerous on S. bank. The central part of main street is paved with cross-slabs of stone covering a drain ; other streets are cobbled.
	The river, here about 40 yds. wide, is crossed by two wooden bridges with parapets. The more westerly *Ning-hai Ch'iao* is broader and more substantial but blocked with booths. Large junks only come up to the other bridge (*P'ing-yang Ch'iao*). The trade is mostly with Shanghai.
	Above the town there is a weir with four openings and massive stone buttresses with grooves for sluice-gates. The two central openings have wooden bridges, the side openings stone bridges with wooden parapets. Telegraph lines to Shanghai, Tsungming, and Kiangyin.
40	**Liu-tu-ch'iao** (Lu-to-chiao), market town on r. (100 houses). Creek and road go SE. to Kiatinghsien (about 6 miles).

miles	
46	**Nan-ma-t'ou** (No-mu-tei), straggling village (100 houses). Wooden bridge.
	From here the itinerary is the same as for Route 7 B, mile 39½ onward.
50	**TAITSANG,** P., *West Gate.*

ROUTE 8

SHANGHAI TO WOOSUNG

Authorities: F. G. Turner, April, 1905; War Office Map, Shanghai and Neighbourhood, 1908.

From Shanghai Woosung can be most conveniently reached by steamer on the Huang-p'u River, but the following land routes are also available. General direction N.

(A) Along Railway Embankment (11½ miles)

This is the most direct route and the best for infantry. It is practicable in all weather, though very heavy after rain.

miles	
0	**SHANGHAI.** Leaving the Garden Bridge, which spans the Soochow Creek opposite the **British Consulate,** the road follows the left bank of the creek in a westerly direction.
½	**North Honan Road** is reached. Between the Garden Bridge and North Honan Road the Creek is bridged twice, and opposite that road there is a third bridge. These bridges are fit for all arms. Near Kiangse Road also there is a bridge carrying the water main. This could easily be destroyed at this point and the water-supply of the northern part of Shanghai thus cut off.
	The road is of the usual town type, metalled, and 8 to 10 yds. wide.

miles

Route turns N. across Soochow Creek and continues along North Honan Road.

1¼ Level crossing of railway some 300 yds. E. of **Shanghai Railway Station.**

From the level crossing, which is protected by wooden gates, the railway might be followed, but the better plan is to take the continuation of North Honan Road, known as **Paoshan Road** (or Old Railway Road), past the Mount Pleasure Hotel.

2¼ Road again strikes the railway, after crossing a creek by a wooden pile bridge, 60 ft. long, consisting of 5 spans ; centre span about 18 ft. wide with 10-ft. headway. Roadway of wood 10 ft. wide. The creek is navigable for small boats.

From here the route follows the railway to Woosung. The metalled road crosses the line and goes off to E. The main path to Kiangwan turns to l. (see Route 8 C).

4¾ **Kiangwan,** P. T. RS. Before reaching the railway station two creeks are crossed on bridges of 20- to 30-ft. spans. Infantry and cavalry would have no difficulty in crossing the bridges, but some preparations would be required for the passage of guns.

The station is about 600 yds. to SE. of the village.

Shortly after leaving Kiangwan Station the line crosses another creek by a similar bridge. The railway embankment provides on either side a pathway clear of ballast (3½ to 4 ft. wide on W. side ; 2 to 2½ ft. wide on E. side), so that cavalry could easily advance two abreast.

The country on both sides of the line is low-lying and waterlogged, and at few places only is it possible to leave the railway bank without fording the borrow-pits which run alongside the embankment and are full of water.

8½ The line crosses another creek by a steel-girder bridge about 60 ft. long. There is a footway on the

miles

E. side, and all arms can cross the bridge without any preparation.

9¼ **WOOSUNG,** P. T. RS. A quarter of a mile before reaching Woosung Station the line approaches the river embankment and the shortest route leaves the railway and follows the river embankment, passing the *Woosung Hotel* close to the station, as far as *Woosung Creek.* The embankment is about 20 ft. wide at the top, but is much cut up.

On reaching the Creek it is necessary to leave the embankment and follow a path for about 100 yds. to the bridge, a stout structure on piles fit for all arms.

11½ **Woosung Forts,** RS. From the bridge to Woosung Forts Railway Station there is a broad metalled road practically following the river bank. This road continues past the Forts Hotel to the rear of **Nan-shih-t'ang Fort.**

The route along the railway between Woosung and Woosung Forts is easier but about ½ mile longer.

(B) Along River Bund (15¼ miles)

This alternative route along the River Bund (embankment) is most suitable for cavalry, and the only route by which field artillery could go to Woosung in the wet season.

miles

0 **SHANGHAI.** Leaving the Garden Bridge, opposite the **British Consulate,** the route follows the Broadway and Yangtszepoo Road in a general easterly direction. There are houses on both sides and the road is of the usual town type.

3 *Yangtszepoo Bridge,* a steel structure suitable for all arms. The road turns NE., and houses become fewer especially on the W. side. On the E. side are numerous mills and factories filling the space between the river and the road.

miles

Route continues in a general NE. direction past the New Point Hotel. Houses less numerous, but road still metalled and lined with trees on either side.

6 **China Flour-mill Company's** premises, with a strong jetty. Turning N. road passes between the flour-mills and runs along the river's edge for a short distance. Here the *River Embankment* is met and followed all the way to Woosung, except at mile 7½, where a short deviation is necessary. The width of the embankment at the top varies considerably; generally it is more than 8 ft. and not infrequently reaches 15 ft. The side slopes are about 1 in 1 to 1 in 2, and the whole bank is covered with coarse grass and reeds. Along the middle of it there is a path about 18 ins. wide which is clear of vegetation. Throughout the greater part of its length there is a wet ditch on the W. or land side, some 10 to 15 ft. wide and 2 to 5 ft. deep with steep banks. This is crossed by a considerable number of stone and wooden bridges, but few of the latter will carry a horse. The vegetation would be no obstacle to the march of troops. In many places troops could march along the foot of the bank on one side or the other, thus obtaining cover from view or fire. The bank is some 8 to 10 ft. above the level of the surrounding country. At short intervals it is crossed by footpaths, and in such places the level has generally been reduced by 2 ft. or more.

6¾ Junk yard on the river's edge. The embankment leaves the river, which here bends away to E.

7½ The embankment is pierced by a creek which has not been bridged. A bridge 60 to 70 ft. long would be necessary. A path here leaves the embankment and, crossing the ditch on a rickety wooden bridge, just strong enough for a pony, runs inland about 100 yds. to a bridge over the above-mentioned creek. This bridge is in very bad repair and will only carry

miles	
	foot-passengers. It is of piles with wooden roadway, about 45 ft. from end to end. The creek here is about 30 ft. wide with steep sides, and varies in depth from 3 to 6 or 7 ft. according to the tide. Beyond the bridge the path turns sharply back to the embankment. If the creek were properly bridged, field artillery would have little difficulty in using this route.
10	The embankment again approaches the river's edge.
13	*Woosung Hotel.* From here the itinerary is identical with that of Route 8 A, mile 9¼ onward.
15¼	**Woosung Forts,** RS.

(C) Along Inland Pathways (12 miles)

In dry weather the pathways via Kiangwan are excellent both for men and horses, though progress would only be possible in single file. In wet weather they are heavy and slippery.

Numerous stone-slab bridges are met with, and unless the animals are accustomed to crossing them considerable delay and difficulty will be experienced. The local ponies are generally well trained in this respect.

The country traversed is typical of the Yangtse delta: flat, well irrigated, and highly cultivated. Numerous small villages and farms are dotted about, their position being generally marked by bamboo clumps and other trees.

Narrow paths, from 18 in. to 4 ft. wide, of which the more important are paved, traverse the fields in every direction. The fields themselves are usually practicable for infantry and cavalry, though in the wet season they are very heavy and horses would find it extremely difficult to move across country.

The principal obstacles to the movement of troops are the numerous irrigation channels, from 10 to 30 or 40 ft. wide, which cut up the country in all directions. These, though mostly fordable at low water, have very soft bottoms and would give trouble. The large ones are unfordable. Bridges are numerous but very rickety and unsafe for horses.

miles	
0	**SHANGHAI.** Route leaves Garden Bridge, opposite the **British Consulate,** and for 2¼ miles is identical with Route 8 A.
2¼	At the point where the metalled road crosses the railway a clearly marked path leads in a NNW. direction. For the greater part of its length the path is paved for barrows but unfit for ordinary wheeled traffic. The pavement is much worn and is about 1 to 1½ ft. wide, the path being altogether some 4 or 5 ft. wide.
3¼	The creek, which up to this point has skirted l. side of path, now turns away to W.
4	**Ying-chia-chai.** Path crosses wide creek.
5¼	**Kiangwan,** P. T. RS. Route enters SW. corner of town.
5¾	Route leaves NE. corner of town. Various paths available. General direction N.
10¼	**WOOSUNG,** P. T. RS. Before entering the town route crosses a wide creek (*Woosung Creek*).
12	**Woosung Forts,** RS.

ROUTE 9

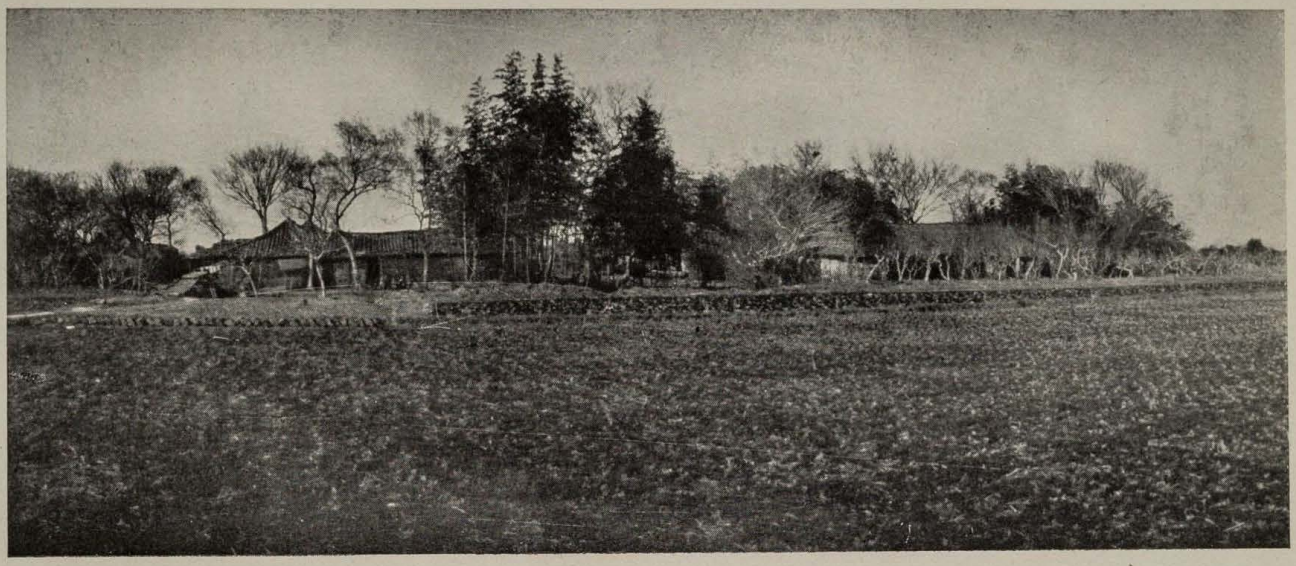
SHANGHAI TO CHANGSHU KU

Authority: A. H. Hilton-Johnson, Nov.–Dec. 1906.

General direction NW. There are two main water routes :

(A) Via Taitsang

As far as Taitsang the route is identical with Route 7, which has five variants. The distance varies accordingly : by Route 7 A, 85¼ miles ; Route 7 B, 74¾ miles ; Route 7 C, 78¼ miles ; Route 7 D, 73¼ miles ; Route 7 E, 81¼ miles. The first of these routes has been followed in the itinerary given below.



SOUTH KIANGSU: TYPICAL VILLAGE

Beyond Taitsang the creek is non-tidal, but has a sluggish current flowing SE. Its average width is 40 yds., and average depth 10 ft. Both width and depth vary considerably.

It is a regular steam-launch route, and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large boats could pass each other practically anywhere.

The country generally is flat and well cultivated, has a moderately wooded appearance, and is much intersected by creeks. Much of it is swampy and impassable. The banks as a rule are sufficiently high to obstruct the view from boats.

There are almost unbroken towpaths for 12 miles beyond Hêng-ching-chuang-chan, and for 4 miles S. of Ching-hsing-ch'iao. Elsewhere no continuous lengths exist.

miles	
0	**SHANGHAI,** P. T. RS. (see *Gazetteer*). From the mouth of the *Soochow Creek.*
	For details to mile 54 see Route 7 A.
54	**TAITSANG,** P. West Gate.
54¾	Route leaves from North Gate (in NW. wall).
57¾	**Hsü-chia-wan** (Zi-ka-vang), 50 houses, on l. Prominent temple on r.
58¼	*P'ao-shu-tun* (P'ao-su-tên), mound 40 ft. high, 200 yds. from l. bank, giving good view of country from top.
59½	**Hêng-ching-chuang-chan** (Wang-ch'ing-tsang-tsan), 30 houses, on r.
	Creek to E. goes to Yang-lin, 5 miles.
60½	**Shwangfeng** (Shang-vêng-tsêng), P., market town (500 houses), mostly lying along small creek going W.
62½	*Fêng-ch'ing-ch'iao* (or Lin-chia-ch'iao), bridge, two temples, hamlet, 500 yds. NNE. route turns W.
	A branch creek to NE. goes to Sha-ch'i-chên (So-tei), 3 miles.
63	**Chetang** (Chih-tang-tsêng), P., market town (2,500 houses). A creek goes NE. to the Yangtse.
65¾	*Wang-tang-miao*, conspicuous temple on r.
	Beyond here Kunshan Hill is often visible.
66¼	**Jên-yang-shih** (Ning-yang-ssŭ), 100 houses.

miles	
68½	**Shan-ching** (San-ching or Siao-sa-pa), 30 houses.
70	**Shihpai** (Sa-pa), P., market town (700 houses). Here route turns SW.
71¾	**Hsin-ts'un** (Sing-ts'êng), 100 houses.
73½	*Hsia-yeh*, small island used as a graveyard at junction of four large creeks, with temple on NW. bank. This is a widely known landmark. No village. Route continues W.
	Creek to S. goes to Kunshan (see Route 9 B) ; creek to N. goes to Changshu Ku via Tungtangshih—see Route 9 C.
74¾	**Nan-huang-ching** (No-wang-ch'ing), village (300 houses), lying both E. and N. of creek junction. Here route turns N.
79	**Patzekiao** (Pu-tzŭ-chiao), P. (600 houses), lying along creek going E., with bridge.
79½	**Hengking** (Wang-ch'ing), P. (1,000 houses), bordering banks for 1 mile.
80¾	*Ching-hsing-ch'iao* (Ch'i-sing-chiao), broken stone bridge and a widely known landmark. Route continues NW.
82	**Ni-chia-hsiang** (Ssŭ-ka-hang), 150 houses, on creek off r. bank.
83½	Mouth of *K'un-ch'êng Hu* (K'un-zêng Wu, lake).
84¾	**CHANGSHU KU,** P. T. (see *Gazetteer*). S. suburb begins here.
85¼	SE. corner of city. Thence W. to South and West Gates, E. to North and East Gates.

(B) Via Kunshan (73 miles)

As far as Kunshan the route is identical with Route 5 B. Beyond Kunshan it is the main water route to Changshu Ku. At Hsia-yeh it rejoins Route 9 A.

The creek beyond Kunshan is non-tidal, but has a sluggish current flowing SE. Its average depth is 10 ft., and average width 40 yds. Both width and depth vary considerably.

It is a regular steam-launch route, and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large boats could pass each other almost anywhere.

The country generally is flat, well cultivated, has a moderately wooded appearance, and is much intersected by creeks. Much of it is swampy and impassable. The banks as a rule are high enough to obstruct the view from boats.

There is an unbroken towpath to Pacheng, elsewhere towpaths are intermittent or non-existent.

miles	
0	**SHANGHAI.** From the mouth of the *Soochow Creek.* For details to mile 48 see Route 5 B.
48	**KUNSHAN,** P. T. RS. *East Gate.*
49	Route leaves from NW. corner, which point is best reached by creek along N. wall. Direction N.
50	Route turns W. into another creek passing under a bridge. After ½ mile creek winds NW.
53½	Route branches N.
55½	Temple on r. Route turns W.
57¼	Route turns N.
57¾	**Pacheng** (P'u-tsang), P. Market town (200 houses).
58¼	*Pacheng Lake* (P'u-tsang Wu) entered. Course bears 335° magnetic to mouth of creek about 1,000 yds. distant.
60½	Village, 300 houses.
61¼	*Hsia-yeh.* From here see Route 9 A, mile 73½.
73	**CHANGSHU KU,** P. T.

(C) Via Tungtangshih (74½ miles)

This provides an alternative route between Hsia-yeh and Ching-hsing-ch'iao. It is very constricted at Tungtangshih and is about 1½ miles longer than the main route, but the creek is a good one and always navigable for vessels up to 4½ ft. draught and 14 ft. beam.

As far as Hsia-yeh either Route 9 A or Route 9 B can be followed.

miles	
0	**SHANGHAI.** From the mouth of the *Soochow Creek*. For details see Route 9 B.
61¼	*Hsia-yeh.* By Route 9 A the mileage would be 73½. Route turns N.
64	**Tungtangshih** (Tang-tzŭ), P. Market town, 700 houses.
65¾	Route continues N. through bridge and enters narrow creek. Branch goes E. to Chetang and is said to be navigable for small boats only, owing to low bridges.
67¼	Route turns W.
69½	**Ch'i-lang,** village on l. (100 houses).
70	*Ching-hsing-ch'iao* (Ch'i-sing-chiao). From here see Route 9 A, mile 80¾.
74½	**CHANGSHU KU,** P. T. Route enters SE. corner. By Route 9 A the mileage would be 86¾.

ROUTE 10

FUSHAN TO CHANGSHU KU (11 miles)

Authority: A. H. Hilton-Johnson, Nov. 1906.

General direction S. This is the only direct water route connecting Changshu Ku with the Yangtse. The creek is known as the Fushan Kang (Chiang) or T'ang. It is tidal throughout; average force of tide 2 miles per hour, average rise and fall 2 ft. It has a uniform width of 12 yds., average depth 7 ft. It is not a regular steam-launch route, but (so far as can be ascertained) is always navigable for vessels up to 3½ ft. draught and 16 ft. beam. Many sharp bends would limit the length of tow. S. of Fu-shan-so there are few points at which large boats could pass each other. The country generally is flat and well cultivated, has a moderately

wooded appearance, and is dry and passable, with very few creeks. The banks are 10–40 ft. high, thickly wooded for the last 5 miles, and no view from boats is obtainable. There is a continuous towpath throughout, passable for animals and wheelbarrows, of which, however, very few are available, since neither are used to any extent. A telegraph line from Fushan to Changshu Ku follows the course of the creek.

miles	
0	Mouth of creek in *Yangtse River* is narrow and shallow. About 50 large river and creek junks are always available. About 1 mile to the W. are the hills *Mao-chia Shan* (Mo-ka Sän) and *Tien Shan*, formerly the site of batteries now dismantled. These hills command the town and creek as far as Hsiao-chia-ch'iao, and are well situated to cover a landing in this neighbourhood.
	Fushan (Fu-sän), P. T., a market town (800 houses) bordering creek for 1 mile.
1	Creek leaves the town through old sea-wall, an earth bank extending roughly from Kiangyin to Shanghai. Except between Shanghai and Liu-ho (Route 7 E, sect. 2), it is useless as a road owing to unbridged gaps at many creeks.
1½	*Fu-shan-so* consists of an earth bank about 10 ft. high and 2 ft. thick fronting on r. bank for about ½ mile, at the S. end of which is a mud and masonry wall about 100 yds. square, 8 ft. high, and 1½ ft. thick, enclosing barracks occupied by 1,000 infantry.
1¾	**Nan-mên** (No-mên), 50 houses, southern suburb of Fushan.
3¼	**Hsiao-chia-ch'iao** (Siao-ka-chiao), 100 houses with bridge.
4½	**Chên-chia-ch'iao** (Chêng-ka-chiao), 100 houses with bridge.
6	**Siehkiakiao** (Sia-ka-chiao-tsêng), 200 houses with bridge.

miles	
7	**Hsin-ch'iao** (Sing-chiao), bridge and hamlet (20 houses).
8	**Mao-chia-ch'iao** (Mo-ka-chiao), bridge and hamlet (20 houses).
10	**Li-chia-ch'iao,** bridge and hamlet.
10½	**CHANGSHU KU,** P. T (see *Gazetteer*). Northern suburb begins here.
	Niu-t'ou (Niu-tei) *Shan* (hill range) on r.
11	North Gate. It is in water communication with other gates via E. wall only.

ROUTE 11

CHANGSHU KU TO SOOCHOW (22½ miles)

Authority: A. H. Hilton-Johnson, Dec. 1906.

General direction SSW. This is the main water route. It is non-tidal, but has a sluggish current flowing S. Its average width is 40 yds., and average depth 12 ft.

It is a regular steam-launch route and is always navigable for vessels up to 6 ft. draught and 16 ft. beam. Large boats could pass each other practically anywhere.

The country generally is flat and well cultivated, has a moderately wooded appearance, and is much intersected by creeks. Towards Changshu Ku it becomes swampy and impassable.

The banks are low and permit good view from boats.

For the last 6 miles there is a continuous towpath, passable for animals and wheelbarrows; elsewhere it is very intermittent and often disappears.

miles	
0	**CHANGSHU KU,** P. T. (see *Gazetteer*). Route leaves from the *South Gate* and passes through the S. suburb. Waterway very narrow and congested.
½	Suburb ends.

miles	
2¼	**Yao-chia-tien** (Yo-ka-tieh), village on r. (200 houses).
3¾	Brick kilns on r.
5	*Hua-tang* (local name Wu-tang), lake or reed swamp. Creek opens out into E. end of it for 1 mile.
	Route to Wusih branches off to NW. (see Route 12 A).
6	Route leaves the lake.
9	*Li-wang-miao*, conspicuous temple on r.
10¼	**Wu-t'a-shih** ('Ng-t'a-ssŭ), market town (200 houses), chiefly on l.
13½	*Yao-shan-ching*, prominent temple on r.
	Creek going E. is regular steam-launch route to Tangkow.
16	**Ma-chia-t'ai** (Mo-ka-tei), village on r. (300 houses).
18	**Likow Ku,** P., market town (2,000 houses).
19¾	**Lumu** (Lo-'m-tsêng), P., market town bordering creek for 1¼ miles. 6,000 (?) houses.
21½	**SOOCHOW,** P. T. RS. (see *Gazetteer*). N. suburb begins.
22½	Route ends at the *Ch'i Mên* (Zi Mên), the only gate in N. wall.

ROUTE 12

CHANGSHU KU TO WUSIH

Authority: A. H. Hilton-Johnson, Dec. 1906.

General direction, WSW. There are alternative routes:

(A) Via Huang-ni-tai (27 miles)

This is the direct water route via the Hua-tang and Yüan-shan-tang (lakes).

For the last 21 miles distances had necessarily to be estimated, and are liable to be considerably in error.

The creek is non-tidal, but has a sluggish current flowing E.

Its width averages 25 yds., but varies largely. Its average depth is 7 ft.

It is not a regular steam-launch route, but is always navigable for vessels up to $3\frac{1}{2}$ ft. draught and 12 ft. beam, the latter being limited by bridges. Headroom under lowest stone-slab bridge (Miao-ch'iao) is only 9 ft. in winter and $6\frac{1}{2}$ ft. in summer, but with a hundred men and tackle the tops of this and other similar bridges are easily removable. Boats could pass each other practically anywhere except between the Hua-tang and Ling-tang (lakes), where the creek narrows to under 10 yds.

The country generally is flat, largely under mulberry cultivation, with a well-wooded appearance, and dry. It is usually impassable owing to the very large number of creeks intersecting it.

Except for 2 miles before Shih-tai-ch'iao, the banks are low, but the view is much restricted by trees.

Towpaths are intermittent for the first 6 miles, then entirely absent.

miles	
0	**CHANGSHU KU,** P. T. (see *Gazetteer*). Route leaves from the South Gate.
	For the first 5 miles it is identical with Route 11.
5	*Hua-tang* (Wu-tang). In this lake the routes divide : the route to Soochow continuing SW., whilst the present route turns NW. and crosses the whole length of the lake.
$8\frac{1}{4}$	**Shên-ta-ch'iao** (Sêng-ta-chiao), village (40 houses) at N. end of the lake. Route leaves the lake and passes under a bridge.
$8\frac{3}{4}$	*Chou-yi-chuang*, a large memorial hall, on r. Here route turns SW.
9	**Miao-ch'iao** (20 houses), with bridge.
	Route enters *Ling-tang* (lake) at NE. corner and crosses it to the S.
10	Route leaves Ling-tang.

miles	
13	*Yüan-shan-tang* (lake). Yüan Shan (hill) on r.
14¾	**T'ai-p'ing-ch'iao** (30 houses), on r., with bridge.
15¼	**Chung-an-ch'iao** (30 houses), on r., with bridge.
15¾	**Hsi-an-ch'iao** (20 houses), on r., with bridge.
17¼	**Chiu-li-ch'iao,** wooden bridge, hamlet on r.
18	**Shih-tai-ch'iao** (Sa-tai-chiao), 100 houses, with bridge.
19¾	**Ya-ch'êng-ch'iao** (50 houses), on r., with bridge.
21¼	Alternative route branches off to S. (see Route 12 B).
24¾	**Huang-ni-tai** (Wang-ni-tei), 100 houses.
26½	Railway bridge (Shanghai–Nanking line) in N. suburb of Wusih.
27	**WUSIH,** P. T. RS. (see *Gazetteer*). Route enters by the Ssŭ-pao-ch'iao (bridge) near the North Gate.

(B) Via Tungting (about 29 miles)

This is an alternative water route between Ya-ch'êng-ch'iao and Wusih. It is said to be navigable only for low-built boats on account of bridges. It leaves the main route 1½ mile W. of Ya-ch'êng-ch'iao and joins the Grand Canal about 1 mile from South Gate of Wusih.

miles	
0	**CHANGSHU KU,** P. T.
	For details to mile 19¾ see Route 12 A.
19¾	**Ya-ch'êng-ch'iao,** bridge, village on r. (50 houses).
21¼	Route turns S.
22¼	**Tungting,** P.
24½	**Hung-ch'i-shih.**
25¼	Route turns W.
27 (?)	Railway bridge (Shanghai–Nanking line).
28	Route enters Grand Canal.
29	**WUSIH,** P. T. RS. South Gate.

ROUTE 13

CHANGSHU KU TO KIANGYIN (40 miles)

Authority: A. H. Hilton-Johnson, Dec. 1906.

General direction, NW. This is the main water route, via Wang-chuang-shih and Yün-t'ing-ch'iao. It is tidal from Changking to Kiangyin. Average force of tide 2 miles per hour; average rise and fall 1½ ft. Its width varies from 5 yds. to 140 yds., average depth 9 ft. It is not a regular steam-launch route, but is always navigable for vessels up to 4½ ft. draught and 14 ft. beam (this last being limited only by a defile which occurs at Changking). Large boats could pass each other practically anywhere.

The country generally is flat and well cultivated, and has a moderately wooded appearance. Much of it is swampy and impassable. It is very thickly intersected by creeks, especially E. of Wang-chuang-shih. Banks 20 ft. high often obstruct the view from boats. Towpaths are very intermittent, and often disappear for many miles. From Lukia-kiao northwards the route is always commanded by hills.

miles	
0	**CHANGSHU KU,** P. T. Route leaves *West Gate* and for 3 miles lies through straggling W. suburb. Hill range *Niu-t'ou Shan* (700 or 800 ft. above the plain) on r.
3½	*Shang Hu* (Zang Wu). Route enters lake on l. Mouth of creek on far side imperceptible and bears 275° magnetic.
5¼	Creek opens out into lake. Mouth of creek on far side bears 310° magnetic.
13¼	**Wang-chuang-shih** (Wang-tsang-ssŭ), market town 400 houses).
15½	**Chiang-hsia-ch'iao** (Kang-wu-chiao). Bridge, village on l. (100 houses).

miles	
17¾	**Chenchusze** (Chêng-tzŭ-tsêng), P., market town (200 houses).
21	**Changking** (Chang-ch'ing-tsêng), P., market town (500 houses).
24	**Chang-chia-yi,** village on r. (100 houses).
25¼	**Lukiakiao** (Lo-ka-chiao), P. Bridge, village (100 houses).
27¾	**Hu-tai-ch'iao** (Wu-ta-chiao). Bridge, village (150 houses).
29½	**Yang-chia-ch'iao.** Bridge, village on r. (100 houses).
30½	**Mao-shu-ch'iao** (Mai-tzŭ-chiao). Bridge, village (50 houses).
31¾	**Huang-ts'un-ch'iao** (Wang-ts'êng-chiao). Bridge, hamlet on l.
32½	**Ting-shan-ch'iao.** Bridge, hamlet on r.
34	**Yün-t'ing-ch'iao.** Bridge, village (200 houses).
35¾	*Lu-t'ou-ch'iao.* Bridge.
36	Roman Catholic Mission Church at foot of hill on r.
36¾	*Ch'i-shan-ch'iao.* Bridge.
38½	**P'u-lu-ch'iao.** Bridge, hamlet.
39¼	**Pankiao Ku,** P. Bridge, straggling village (200 houses).
39½	Route joins creek from Wusih to Kiangyin (see Route 14, mile 22½).
40	**KIANGYIN,** P. T. (see *Gazetteer*). Half mile from South Gate. Thence creek branches—(*a*) W. to West and North Gates and Yangtse River, and is always navigable; (*b*) N. to East Gate, and is navigable for small boats only, except at spring tides.

ROUTE 14

WUSIH TO KIANGYIN (23 miles)

Authority: A. H. Hilton-Johnson, Dec. 1906.

General direction N. This is the main water route by the Grand Canal to Kao-ch'iao (bridge), thence via Tsingyang. It is tidal beyond Tsingyang: average force of tide 2 miles per hour, average rise and fall 1½ ft. Its average width is 20 yds., and average depth 9 ft. It is a regular steam-launch route, and is always navigable for vessels up to 4½ ft. draught and 16 ft. beam. Large boats could pass each other almost anywhere.

The country generally is flat, well cultivated, and has a moderately wooded appearance. For the first 17 miles much of it is swampy and impassable. To Tsingyang the banks are low and a good view from boats is obtainable. Thence they rise and from Nan-tsê-chên are 40 ft. to 80 ft. high. There is a continuous towpath for the first 3 miles, then it is practically non-existent for 6 miles, and then again continuous to Kiangyin, with one break at San-ho-k'ou. Beyond Nan-tsê-chên it is passable for men only, elsewhere for animals and wheelbarrows.

miles	
0	**WUSIH,** P. T. RS. (see *Gazetteer*). Route leaves from *North Gate*, and for 1 mile lies through northern suburb; waterway very congested.
3¼	*Kao-ch'iao*, high single-arch stone bridge on r. Route leaves Grand Canal and turns N. The Shanghai–Nanking Ry. crosses the creek in this neighbourhood.
4¼	*Pai-t'ang-yü*. Creek opens into shallow lake; channel follows l. side, and care is required in winter navigation.
10	**Shihchwang Ku** (Sa-tsang), P., market town on l. (100 houses).

miles	
11¼	**Shih-tao-ch'iao** (Sa-tao-chiao). Bridge, village on l. (50 houses).
	Just S. of here branch goes W. to Changchow Ku (Route 15), and is an alternative route to San-ho-k'ou, 7 miles N.
12	**Hsiao-ch'ing-yang,** village (300 houses).
13	**Tsingyang** (Ch'ing-yang-tsêng), P., market town bordering creek for ¾ mile (2,000 houses).
17	**Yuehchengkiao** (Yüeh-tsêng-chiao), P., market town (300 houses).
18¼	**San-ho-k'ou** (Sän-wu-k'ei), village on l. (50 houses). Route turns r.
	Branch l. goes to Changchow Ku (see Route 15, mile 19).
19¾	**Nan-tsê-chên** (No-za-tsêng), market town (300 houses).
22½	Creek from Changshu Ku joins in on r. (see Route 13, mile 39½).
23	**KIANGYIN,** P. T. (see *Gazetteer*). Half mile from South Gate. From here creek branches W. to North and West Gates and Yangtse River, and is always navigable ; the waterway N. to East Gate is navigable for small boats only.

ROUTE 15

CHANGCHOW KU TO KIANGYIN (24 miles)

Authority : A. H. Hilton-Johnson, Jan. 1907.

General direction NE. This is the main water route, via Ch'ên-tu-ch'iao and Nan-tsê-chên. It is tidal towards Kiangyin : average force of tide, 1½ miles per hour. Average rise and fall, 1 ft. There is also a sluggish current flowing NE. Its average width is 25 yds. and average depth 8 ft. It is not a regular steam-launch route, but is always navigable for

vessels up to 4½ ft. draught and 16 ft. beam. Large boats could pass each other practically anywhere.

The country generally is flat and well cultivated, and has a well-wooded appearance. Much of it is swampy and impassable. To Shihyen the banks are low, thence they are high and obstruct view from boats. There is a continuous towpath passable for animals and wheelbarrows for the first 15 miles; thence it is broken by creeks for 1 mile, and again continuous. From Nan-tsê-chên it is passable for men only. The hills near Shihyen command the creek, and are well situated to oppose an advance.

miles	
0	**CHANGCHOW KU,** P. T. RS., important city on the *Grand Canal* (see *Gazetteer*). Route leaves from North Gate.
1½	**Shên-chia-ts'un** (Sên-ka-ts'êng), village on l. (50 houses).
4¾	**Yang-tu-ch'iao.** Bridge, village on l. (100 houses).
6¾	**Chang-chia-ts'un** (Chang-ka-ts'ên), village on l. (20 houses).
7¼	**Shih-t'ou** (Sa-tei), village (20 houses).
8¼	**Ch'ên-tu-ch'iao,** market town (500 houses).
9	**Pai-yang-ch'iao** (Pa-yang-chiao). Bridge, village (50 houses).
10¼	**Hei-t'ang-ch'iao.** Bridge, village on l. (20 houses).
11½	**San-ho-k'ou** (Sän-wu-k'ei), market town (500 houses), not to be confused with village of same name at mile 19. Here route turns SE. from E. end.
13	**T'ou-yü-ti,** village on r., 50 houses and Roman Catholic Church.
13¾	**Shihyen** (Sa-yen-ssŭ), P., market town (200 houses). From N. end a good creek starts. It is said to be always navigable for boats up to 3 ft. draught. It goes SW. to Chishuyen on Grand Canal, 17 miles NW. of Wusih.
14¾	**Hui-chi-ch'iao** (Wai-chi-chiao). Bridge, village on r. (50 houses).

miles	
	From here a good creek, average width 15 yds., goes S. to Wusih via Shih-tao-ch'iao (see Route 14).
15½	**Chang-kung-ch'iao** (Tsang-kung-chiao). Bridge, village (20 houses).
17½	**Shao-hsiang-ch'iao.** Bridge, village on l. (50 houses).
19	**San-ho-k'ou** (Sän-wu-k'ei), village on l. (50 houses). Route continues N.; branch S. goes to Wusih.
	From this point the route is identical with Route 14.
23¾	**KIANGYIN,** P. T. (see *Gazetteer*). Route ends in S. suburb.

ROUTE 16

LOSHE (ON GRAND CANAL) TO WUHU (ANHWEI)
(about 143½ miles)

Authorities: G. E. Pereira, Dec. 1907; War Office MS. map of South Kiangsu, Sept. 1909.

The general direction is from E. to W. Loshe is on the Grand Canal 8½ miles NW. of Wusih (see Route 1 A, sect. 3). This is the most direct, but not the main route, which would be up the Grand Canal by steam-launch to Chinkiang and by steamer to Wuhu, or else by train via Chinkiang to Nanking, and thence by steamer. It leaves the Grand Canal ½ mile N. of Loshe[1] and follows up the Loshe River to the Hsi-t'ai Hu (Si-t'a Wu), a lake marked Kê Hu on maps. It then follows S. down the Pin-yün River to Ihing, where it again turns W. across two lakes and up the Wên-ting River to Liyanghsien, whence it goes up the Tung-pa River to the Lower Barrier. The 3 miles from here to the Upper Barrier can be done by small boats on the canal, or by land with wheelbarrows. Boats are again taken from the Upper Barrier up the Ku-cheng River to Kucheng Ku, across the Hsiao-nan Hu (marked

[1] According to War Office map the entrance to the main creek is at Wu-ma about 3 miles NW. of Loshe.

Kucheng Hu on maps) to Kaoshun, down the Kaoshun River to Hsiao-hua-liu-chia-ts'un, where it joins the Sha Ho (Sa Ho). This river is then ascended in a southerly direction to Hsi-tou-mên, whence it goes westerly down the Kuei-hsi River to Wuhu.

Distances were measured at first by perambulator, and afterwards by time. The greater part was done by walking, but owing to constant changes from land to boat the distances given by this route are only fairly accurate.

Rivers are non-tidal. The currents are not strong, but the direction of the flow is somewhat complicated. Starting from the hills behind Ningkwofu in SE. Anhwei, the rivers flow northerly ; one stream (the Sha Ho) flows past Ningkwofu to the village of Hsi-tou-mên, where it bifurcates, one branch (called the Kuei-hsi Ho) turning W. and flowing into the Yangtse at Wuhu, another branch going N. for 3 miles to Hsiao-hua-liu-chia-ts'un, and then winding NW. and flowing into the Yangtse at Taiping An. Other streams from the hills near Ningkwofu must flow N. into the Hsiao-nan Hu (lake), from which one branch (the Kaoshun Ho) flows out at the NW. corner at the city of Kaoshun and joins the Sha Ho at Hsiao-hua-liu-chia-ts'un, whilst another stream (the Kucheng River) flows out at the NE. corner at the town of Kucheng Ku to the Upper Barrier (Shang-pa). Here its further progress is entirely blocked by the barrier, a stone dam built across it. Numerous side-creeks take off some of the water from the river.

At the Upper Barrier the old course of the river has been blocked up for three miles to the E., as far as the Lower Barrier (Hsia-pa), and a canal without outlets has been made, along which only small boats can go. This canal is about the same level as the Kucheng River.

At the Western Barrier begins the Tung-pa River (formed by the rains). It is 24 ft. below the level of the canal between the Barriers, and flows easterly to Ho-k'ou-chên, where it crosses the San-t'a Tang, and continues to Liyanghsien, to the W. of which it is joined by the Kintan River, coming from

the N. It is now called the Wên-ting River and flows to the S. of the city of Ihing, eventually going into the T'ai Hu.

The Pin-yün River coming from the Hsi-t'ai Hu flows S., and passing to the E. of Ihing joins the Wên-ting River and flows into the T'ai Hu.

The Loshe River also starts from the Hsi-t'ai Hu and flows E. into the Grand Canal, half a mile N. of Loshe.

Père Havret in his monograph on Anhwei (pp. 6–8) states that originally there was an outlet for the Yangtse from Wuhu to Ihing. Owing, however, to the floods caused by it, a single barrier was put up across the river in 1368. This was broken through in 1849, and was replaced by the present double barriers (upper and lower), while the bed between them was narrowed into a canal.

When the Yangtse is high its waters overflow into the side creeks, and the current will be found to flow out of the Yangtse instead of into it. This is the case in the Kuei-hsi River, called by foreigners the Wuhu Creek.

The rivers followed in this route vary a good deal, but they are mostly 40–50 yds. wide and 7–10 ft. deep. The inhabitants state that from December (and perhaps November) to March the rivers are low, and usually boats cannot go beyond Ho-k'ou-chên ($11\frac{1}{4}$ miles east of the Lower Barrier), nor from the Upper Barrier W. to Kaoshun. There are also two shallow places between Wu-hsi (20 miles E. of Wuhu) and Wuhu, and even in December a steam-launch had to unload passengers to get over. The river from Taiping An to Hsiao-hua-liu-chia-ts'un is deeper than that from Wuhu to the same place, and big boats can go by the former when the latter is impassable. Large salt junks from Chinkiang go up to Kaoshun by the former route.

The autumn rains of 1907 made the river abnormally high in December, and it was possible to go right up to the Lower Barrier and start again from the Upper Barrier, but this is said to be quite exceptional. (For description of the Barriers see mile $90\frac{3}{4}$.) It was stated that ice never affects the rivers, but there was no way of judging, as it was very mild in December 1907.

Bridges and ferries are numerous east of the Barriers, and ferries also west of them, but east of the Barriers a boat is not always at hand for crossing the side-creeks. Sometimes the entrances to these side-creeks are bridged, sometimes the bridges are some hundred yards up, and sometimes they are non-existent. The lowest bridges are those round the city of Liyanghsien.

Steam-launches have been right up to the Lower Barrier. There is a regular service from Wusih to Liyanghsien, and a steam-launch has recently been started from Liyanghsien to Ting-pu-chên ($3\frac{1}{4}$ miles E. of the Lower Barrier). Steam-launches run from Wuhu to Ningkwofu, following this route as far as Hsi-tou-mên.

The common types of boats between Loshe and the Tung-pa Barrier are: (*a*) *Mi-ch'uan* or rice boat, averaging 40 ft. long, 6 ft. wide, 3 ft. draught, carrying 40 or 50 tons. (*b*) *Hu-ch'uan*, from the T'ai Hu, 75 ft. long, 11 ft. wide, $3\frac{3}{4}$ ft. draught; a flat decked boat, and in mild weather the most suitable for transport of men. (*c*) *Kao-shun-ch'uan*, 50 ft. long, 11 ft. wide, $3\frac{3}{4}$ ft. draught, carrying 36 tons. (*d*) *Ssŭ-chua-ch'uan* or *p'u-tsao-tzŭ*, 45 ft. long, 9 ft. wide, and $3\frac{3}{4}$ ft. draught, carrying 27 tons. (*e*) *Ya-shao-tzŭ*, 40 ft. long, 7 ft. wide, $3\frac{1}{4}$ ft. draught, carrying 22 tons. About 40 boats of the above types were counted at the Tung-pa in December, 1907, and smaller boats were very numerous. On the western side of the Tung-pa Barrier the *kao-shun-ch'uan* are used, but most of the boats on that side are Anhwei boats. The biggest boats that go up the Kuei-hsi River from Wuhu to Kaoshun carry 40–45 tons, but the waterway from Taiping An to Kaoshun is navigable, except from December to March, for sea-going *yen-ch'uan* or Salt Junks, 90 to 100 ft. long, 10 ft. wide, $6\frac{1}{2}$ ft. draught, carrying 136 tons.

The country is flat, with slightly undulating ground near the Barriers. On the eastern side it is generally highly cultivated, with some lakes, or rather swamps. There are usually hills to the S. Beyond the Barriers, going W., the country is very low-lying and was mostly under water in December, 1907; in addition there were large patches of

waste land, especially approaching Wuhu. The country is open, and E. of the Barriers intersected by very numerous creeks in every direction. Villages are numerous and there are trees around them, but on the whole it is sparsely wooded.

It would be a difficult country for the passage of troops by land; impracticable for cavalry or field artillery. In fact, it could only be done by the construction of innumerable bridges in parts between the Grand Canal and the Hsi-t'ai Hu, and from Ihing to Liyanghsien.

There are poor towing-paths from the Hsi-t'ai Hu to Ihing, and from the Upper Barrier to Kucheng Ku. From Kaoshun to Hsi-tou-mên the towing-path is broader, and it widens to 6–10 ft. along the Kuei-hsi River. Here there were tracks of wheelbarrows, though none were actually seen.

The banks are generally high, especially W. of the Barriers, and obstruct the view from the boats.

The country is unsuitable for camping-ground, except actually at the Barriers; on the western side it was mostly flooded, and on the eastern side mostly given up to paddy-fields.

The country is thickly populated, and rice, vegetables, fish, ducks, and pork can be obtained in large quantities; chickens are scarce. Bullocks are plentiful, but beef is not generally procurable in shops. Small white goats are fairly plentiful. There is native flour, but it is of very poor quality.

Water, as usual in China, would have to be boiled.

(Apart from going via Chinkiang, the alternative route would be to go from Kaoshun as far as Hsiao-hua-liu-chia-ts'un and thence to Taiping An, said to be 30 miles distant. This would be preferable for big boats.)

miles	
0	**Loshe** (Lo-za), P. Follow the W. bank of the *Grand Canal* from Loshe bridge in NW. direction for 940 yds. Chief towing-path on E. bank.
½	*Hua-tu-ch'iao* (Hu-tou-chiao). Single-arch bridge

miles

14 ft. above water and 5½ yds. wide, over entrance to the *Loshe River*, here 30 yds. wide, 8 ft. 5 in. deep.

For next 2½ miles a winding footpath to N. of river can be followed.

1 **Liu-hsiang** (Lei-hang), 30 houses, 300 yds. to N. of river. Through **Ch'ên-hsiang** (Shên-hang), 30 houses and **Kuo-hsiang** (Kei-hang), 40 houses.

1½ **Hui-hsiang** (Hui-hang), 30 houses, 100 yds. from l.

1¾ **Ta-ch'uan-t'ou** (Ta-zên-t'ei), 200 yds. from r. Here river winds a good deal and path has to bend further to N., and crosses two creeks by footbridges.

2¾ **Kao-ming-ch'iao** (10 houses), with single-arch stone bridge, 8-yard span and 15 ft. above water. River 30 yds. wide, 8 ft. 11 in. deep.

3¼ **T'ang-hsiao-ch'i-hsiang** (Tang-hsieh-chi-hang), 15 houses, 50 yds. from l. River now 70 yds. wide, 11 ft. deep, with marshy ground 150 yds. wide on S., and a passage for boats at southern end.

3¾ **Hsia-ch'i-hsiang** (Hu-chi-hang), 60 houses, 300 yds. from r. A ferry over river, here 50 yds. wide.

Hui Shan (Wei Sän, mountain), 3 or 4 miles to SE., with lower hills running from it to the SW.

4 A creek runs for 1¼ miles to S., when it ends, passing Yang-shu-yüan (Yang-tzŭ-shuo) after a mile.

River now 100 yds. wide, mostly 9 ft. deep, passes a swamp ¼ mile broad, and extending S. to Yang-shu-yüan creek.

4¾ River 11 ft. 5 in. deep.

A branch canal runs northwards past Hsia-ch'ang-t'ou (Hu-chang-t'ei) into the Grand Canal.

River now 30 yds. wide and 12 ft. deep.

5¾ **Pei-hsin-ch'iao** (Po-hsin-chiao), 50 houses, on r., with a single-arch stone bridge over river, span 6 yds. wide and 15 ft. high.

6½ Canal crosses river at right angles, 40 yds. wide

miles

crossed by a stone bridge ¼ mile to S. of the river, and by a plank bridge 200 yds. to N. It flows into the Grand Canal; the natives state it joins the Yangtse.

Soon afterwards reach **Ch'iang-hsiang-shang** (6 houses) on l. River now 11 ft. deep, 50 yds. wide.

7 **An-ch'iao** (Un-chiao), 25 houses.

Canal to N. goes to Kiangyin.

Single-arch stone bridge over river. Beyond it another creek crosses canal. Canal 8 ft. deep and 60 yds. wide. ¼ mile wide belt of reeds and marsh on l., with parallel creek (with boats) beyond.

Country on r. low-lying, protected from river by 3 ft. bank.

8 Swampy ground on l. ends.

Another cross creek, 40 yds. wide, with stone bridge ¼ mile to N.

River 9 ft. deep, soon 12 ft., and 30 yds. wide. **Ma-chia-kou** (Mo-ku-kei), 40 houses, 600 yds. from r. **Tso-shê-li** (Tsei-sa-li), 45 houses, 300 yds. from l.

8¾ **Kuan-t'ang-ch'iao** (Huan-tang-chiao), 30 houses, with a single-arch stone bridge over river. River 20 yds. wide, soon 30 yds. Mostly reeds and marshy on l.

9½ **Ts'ên-ts'un** (Chên-ts'ên), ½ mile from r., with cross creek from it.

This creek, spanned by a stone bridge, runs S. to Wusih.

River 11 ft. deep to 13 ft., 50 to 100 yds. wide.

10 **Nan-yang-hu** (Nê-yang-wu), 20 houses, on l. *Hsi-yang Shan*, 600 ft. high, 2 miles to S. This hill is a conspicuous landmark.

10½ Another canal goes S., joining creek from Ts'ên-ts'un to Wusih, passing **San-pai-tu** 300 yds. from l.

10¾ **Tung-chien** (20 houses) on r. River over 100 yds. wide. Three-arch stone bridge, 6 ft. high, over

miles

entrance to canal on r. River 10 to 13½ ft. deep. Reeds along l. Many side-creeks.

11¾ Reeds on l. Ferry to **Hsi-chuang** (Si-chang), 30 houses, 300 yds. from l. River 40 yds. wide.

12 **Taikikiao** (Tie-chi-chiao), P., said to have 200 houses (only 40 or 50 near river) on r. Another stone bridge over river. Just below it river bifurcates, the southern channel being the Loshe River.

The northern channel is said to go on to Changchow Ku on the Grand Canal.

River now 60 yds. wide, 10½ ft. deep. Many small side-canals.

13 Rice-fields and marshy on l. Creek on r., which ends after ½ mile. River 50 yds. wide, 9½ ft. deep.

13¾ **T'ien-ching-ch'iao** (Tieh-ching-chiao), 80 houses, on r. River crossed by single-arch stone bridge. Above it river joined by creek coming from S.

The creek comes from the T'ai Hu via Hsi-yen-ch'iao, and is used by numerous boats.

River 40 yds. wide, 12 ft. deep.

14¼ *Chiang-chuang-ch'iao*, a single-arch stone bridge, with **Chiang-chuang-ts'un** (30 houses), 100 yds. to l. River 14 ft. deep and 40 yds. wide. Country on l. less low-lying. River soon 70 yds. wide, and 9 ft. or 10 ft. deep in centre, 6½ to 7 ft. near l. bank.

15 Creek, 40 yds. wide, goes to Tanyang on the Grand Canal.

Route turns SW. Small clumps of pampas grass scattered about. **Pien-chia-t'ou** (Ping-ka-t'ei), 20 houses, 50 yds. from l. Small villages more plentiful, with trees and some bamboo.

15¾ River 11 ft. deep, 40 yds. wide.

16¼ **Hsia-tu-ch'iao** (Ho-tu-chiao), 13 houses, on r. A single-arch stone bridge across river. **Nan-chai-chên** (Nê-cha-chên), 80 houses, ½ mile to S. A good many small clumps of pampas grass for the next 6 miles.

miles

River 50 yds. wide and 11 ft. deep.

17½ *Fu-shan-ch'iao* (Fu-sän-chiao), single-arch stone bridge over river. **Lai-chuang** (40 houses) 300 yds. from r.

200 yds. above bridge river bifurcates, making a small island. Northern channel not passable for big boats owing to a low wooden bridge just before it rejoins main channel. Go by southern channel, nearly due S., 35 yds. wide and 10 ft. 5 in. deep.

18¼ Go westerly, a smaller channel going on S.

River 13 ft. deep.

18½ Small channel rejoins river just below. *Ying-shih-ch'iao* (Ying-za-chiao), a single-arch stone bridge, roadway of beams. Five houses on r. River 30–40 yds. wide, 12 ft. deep. Banks and surrounding country higher, 4–6 ft. above water, a towing-path on r. to Yün-ts'un-ch'iao. Creeks not so numerous.

20¼ **Yün-ts'un-ch'iao** (Ying-ts'ên-chiao), 80 or 100 houses, with shops and single-arch stone bridge over river.

21 *Chu-chuang-ch'iao* (Zu-chang-chiao), single-arch stone bridge over river. Only zigzag and very uneven paths across fields.

21¾ **T'ou-chuang-ts'un** (T'ei-chang-ts'ên), 35 houses, 200 yds. from l. Now through a small lake or swamp ½ mile long by ¼ mile broad.

22¾ River 40 yds. wide, 10 ft. deep, swamp ½ mile wide a short distance from l. **Yang-ch'iao-chia-ts'un** ¾ mile to S. Skirt marsh ½ mile wide on r. Towing-path (very uneven) on l.

Country now only 2–4 ft. above water-level. Villages and trees beyond marshy ground.

24½ A short cut for small boats branches off on r.

24¾ Loshe River, which has been followed up to here, is partly an overflow from the *Hsi-t'ai Hu* (Si-t'a Wu). This lake is about ¼ mile to W., and is apparently

miles

mostly covered with reeds. It is said to be 45 li (15 miles) from N. to S. and 10 li (over 3 miles) from E. to W. The Loshe River, just before crossing the Pin-yün River from W. to E., flows under a five-arch stone bridge (*Wu-tung-ch'iao*), whose arches are only 4–6 ft. above the water.

Now leave the Loshe River, and turn S., following down the *Pin-yün River* (Ping-ying Ho), which flows S. It is said to come from Changchow Ku, 60 li (20 miles) distant to N.

Hsia-fang-ts'un (Hu-fang-ts'ên), 50 houses, ½ mile to N. of Wu-tung-ch'iao.

Starting from this bridge, go south along l. of Pin-yün River, badly paved and very uneven towing-path, which crosses entrances of side-creeks by small stone bridges with steps. Path often paved with broken slabs, past paddy-fields on W. Pin-yün River about 40 yds. wide, 12–13 ft. deep, very clear water. Hsi-t'ai Lake ¼ mile to W.; beyond reeds a few sails were seen in distance.

25¼ **Chung-ch'i-ch'iao** (70 houses), with single-arch stone bridge over river. Pass one or two brick-kilns.

25¾ *Hsi-t'ai* Lake about 70 yds. to W. It soon recedes from river.

26¾ **Li-shu-chiang** (Ni-shu-kang), said to have 200 houses, but apparently less; 100 yds. to W., on side creek, which runs from W. to E. **Hsieh-shao-ch'iao** (marked Sie-jow on Wade maps) on or near the T'ai Hu.

27½ **Kuei-miao-ch'iao** (30 houses), with single-arch stone bridge over river.

29¼ Enter **Hokiao** (Hu-jow or Hu-chiao-tsên), P., a long straggling market town without any walls, chiefly on r. It is said to have from 1,400 to 1,800 houses. Three single-arch stone bridges cross river. Bridges called *Ho-fêng-ch'iao*, *Ho-ch'iao*, and *Ho-hsing-ch'iao* respectively.

miles

30 Leave Hokiao. Hsi-t'ai Lake said to be 10 li (3 miles) to W. Country around very flat, with some low hills to the SE.

Follow along towing-path on r. Country 4–8 ft. above water-level. Towing-path crosses ten small bridges over creeks.

32½ Eleventh side-bridge, the *Hsieh-ling-ch'iao*, over creek 40 yds. wide.

The creek comes from Kao-shêng-shih (Kao-sêng-ssŭ) on the W. It flows E. for a short way only, and then ends. Maps erroneously continue it to Huang-p'o-chên (Wang-po-tsên) and the T'ai Hu.

33 **Chi-t'ing-ch'iao** (Jee-ling-jow), village of 70 houses with market (fish, pork, sweet potatoes, cabbages, turnips, onions, oranges, and peanuts). Here cross to l. by a single-arch stone bridge. *Ch'i Shan* (hill) 2 miles to E. Hills on E. now end.

Country now 8–10 ft. above water-level. No good camping-ground even here, as the paddy-fields in the winter are covered with manure.

33¾ Third side-bridge from Chi-t'ing-ch'iao.

Yu-ch'ê-pêng (Yü-so-pang), village 100 yds. up creek to W.

34 Creek, 40 yds. wide, flowing east, crosses river, coming from Kao-shêng-shih and going to Ting-shou-shan. Cross over it on l. by the *Chan-tu-ch'iao* (Sa-tu-chiao), a stone bridge 14 ft. above water-level.

35¼ **Shih-li-p'ai** (25 houses with 3 inns), with another single-arch stone bridge over river, called *Hsing-li-ch'iao* (Hang-li-chiao). Some irrigating wheels near banks. Hills now visible to S. Cross several small side-bridges over creeks.

37½ *San-li-ch'iao*, single-arch stone bridge over river. Small six-storied pagoda on l., 400–500 yds. S. of it.

38 *Kao-ch'iao*, a single-arch stone bridge. Here Pin-yün

miles

River bifurcates, main channel turning east under this bridge.

A smaller channel continues S., and passing under a small stone bridge forms a moat outside north wall of Ihing. This channel is 15 yds. wide. At NW. corner of Ihing it passes under another bridge and flows into the lake to the W. of that city.

The main channel, after passing under the Kao-ch'iao, flows to the NE. corner of Ihing, passes under two bridges, draws near to east wall, and continues to the east water-gate.

Another channel turning E. at the east gate flows through a lake some two miles long and about 300 yds. wide (from N. to S.). At the end of this lake it turns NE. into the T'ai Hu, said to be 30 li (9 miles) distant from Ihing.

About $\frac{3}{4}$ mile E. of the east gate there are two channels, about 100 yds. from each other; the western one is passable for small boats and goes to the SE. corner of Ihing, and then follows near the south wall, passing under a stone bridge (8 or 9 ft. above water-level, where water is only 5 ft. 4 in. deep) and joining the lake at the SW. corner of the city.

The eastern channel is used by steam-launches, and passes under a stone bridge 600–700 yds. from the south gate of the city, and goes into the lake about $\frac{1}{4}$ mile from the SW. corner.

$39\frac{1}{2}$ **IHING,** P. T., a walled city (about 5,000 houses), consisting of two districts, viz., *I-hsing Hsien* (Ni-hsing Hsien) on W. and *Ching-hsi Hsien* (Tsing-chi Hsien) on E., thickly populated (see *Gazetteer*). Route approaches West Gate.

A canal flows through the city, passing through water-gates in west and east walls, and crossed by a stone bridge in centre of city. Beyond the east gate, creek to E. leads to T'ai Hu and Huchowfu (see Route 1 D).

miles

Foot-hills 2 miles to the SE. of city with some scrub; several miles to the S., high barren hills of which the *T'ung-kuan Shan* (Tung-kuo Sän) is the highest. Large lake to the W. of the city called the *Tung-kuei Hu* (Tung-chiu Hu). Leaving west water-gate of Ihing, go W. across the Tung-kuei Hu, 2½ miles from E. to W., and over 2 miles at widest from N. to S. Water flows E., not very clear, but not muddy. 7½ ft. deep outside west water-gate, and 7 ft. 11 in. deep for three soundings in centre. Two or three villages near south shore, some reeds along north shore. Country still thickly populated.

At west end of lake, big boats keep near south bank, though small boats can go between mud banks and reeds further north, passing close to a small tower (*t'ing-tzŭ*) on north bank at exit from channel. A lamp in this tower at night shows boats the channel.

42 **Tung-hsi-t'ou** (Tung-sê-t'ei), 42 houses, on a creek, 100 yds. from south bank near channel at exit from lake. Here coarse thick brown packing paper is made from rice stalks.

Channel at exit from lake, ¼ mile long, 200 yds. wide, and then opens out into a larger lake, the *Hsi-kuei Hu* (Si-chiu Hu), some 5 or 6 miles long and 1¼ to ½ mile wide from N. to S. Country on S. 3 or 4 ft. above water-level, with high hills 3 or 4 miles to S. Reeds near south bank. Lake at first 9 ft. deep, then 6½ and 7 ft.

45 **Chou-hsü-ts'un** (Zou-chu-ts'ên), village of 20 houses 100 yds. from north bank. **Hsi-nan-ts'un** (Chi-nê-ts'ên), 30 houses, opposite, near south bank of lake. Lake 8 ft. deep in centre, and 7 to 7½ ft. at west end.

48 **Kuan-chia-ts'un** (Kun-chia-ts'ên), 20 houses, with temple at west end of lake. About 1 mile to NE. of it is the *Ch'ên-t'ang-ch'iao* (Ts'ên-tang-chiao), a bridge with a small tower to S. of it.

miles

This bridge is over a creek which comes from Yang-hang-ts'un, said to be 9 miles distant.

48½ *Kuang-yüan-lou* (Kuang-yüeh-lou), a white two-storied tower at western end of lake and south bank of the Wên-ting River. A lamp in it at night shows entrance to river.

Proceed up the *Wên-ting River*, which flows E., water not very clear, but not muddy. At first 70 yds. wide and 9 ft. deep. About ¼ mile from lake one branch of the river flows NE. to Kao-shêng-shih.

49 **P'in-tien** (P'ing-tie), 45 houses, on l., with ferry. **Ch'ang-chü-ts'un** (Zang-chih-ts'ên), 30 houses, 100 yds. from l. An unpaved footpath along a 6 ft. high embankment on r. acts as a towpath. Low-lying paddy-fields partly under water on r.

49½ A smaller creek (which also comes from Liyanghsien, but is a longer route) flows in on r. The towing-path follows up this side-river, which is 20 yds. wide and crossed by two shaky wooden pile bridges about 1½ miles up river. From it there are three parallel creeks to the N., all crossed by shaky wooden pile bridges.

Boats continue up the Wên-ting River.

A creek on l. goes to Changchuchen (Zang-chu-tsên), 9 miles off.

High bare hills to S. now recede. Wên-ting River from 8–10 ft. deep, and at Süshechen 16 ft. deep.

51 **Süshechen** (Shu-sa-ts'ên), P., a village of over 500 houses, but only about 80 on the river near Wên-ting Bridge. The bridge is of stone, with large centre arch and two small arches, crossed by 110 steps with 5-yard platform on top, each step 2 ft. wide by 3½ in. high.

A creek flowing S. just above the bridge goes to Chang-chu-chên, 9 miles off; only small boats can go up it.

River here 60 yds. wide, 10 and 11 ft. deep.

miles

Leaving village, towing-path on both banks. Many side-creeks. Embankments 6 ft. above river, low-lying paddy-fields, villages still numerous. No bridges over entrances to side-creeks.

52¼ Creek, 50 yds. wide, comes from Yang-hsiang-chên, 6 miles to N.

Chiang-fu-yü (30 houses), 600 yds. from r.

Shê-yü (So-yü), 30 houses, 100 yds. from l. River 8 ft. deep. Hills now to S. in the distance, except for *Yen-t'ou Shan* (Yeh-tu Shan, 500 ft.), about 4 or 5 miles to the SW., and *Hou Shan*, about 8½ miles to the N., and 600 or 700 ft. high.

53¼ Small creek on r. flows N.

53½ Creek on r. flowing S., from Yang-hsiang-chên, 18 li (5½ miles) to N.

Wan-chia-yü (Vän-chia-yü), ¼ mile from r.

54 **Hsia-hsin-tu** (Yo-sin-tu), 30 houses, 200 yds. from r. River 70 or 80 yds. wide, 13 ft. deep.

Side-creek, 60 yds. wide, comes from Yang-hsiang chên to N., and goes to Tai-pu-chên to S.

55¼ **Wu-chia-yü** (Wu-ka-yü), 20 houses, on r.

56 River 60 yds. wide, 11 ft. deep.

57¾ *Tu-chi-ch'iao*, stone bridge over river with large centre arch and two small side ones ; 35 steps on each side over it. Arch 18 or 20 ft. above water-level. Liyanghsien visible from it.

58¼ River 60 yds. wide, 12 ft. deep. **P'o-yü-ts'un** (P'ao-yü-ts'ên), 40 houses, 300 yds. from l.

58½ Cross side-river, 50 yds. wide (flowing S. to Tai-pu-chên). It is crossed by a stone bridge, on four piers, called the *Hsin-chuang-ch'iao* (Sin-zang-chiao), about 600 yds. to the S.

Hsi-kuo-ch'i-ts'un (Si-ko-chi-ts'ên), 80 houses, 600 yds. from r. bank. River now 11 ft. deep. Towing-path now only on l.

59¼ **Tung-kuo-ch'i-ts'un** (50 houses), 100 yds. from r.

miles

bank. Towing-path now goes over low stone bridges at entrances to side-creeks.

59¾ River 50 yds. wide, 11 ft. deep. Country less low-lying.

60¾ *Hsia-ch'iao* (Yo-chiao), a single-arch stone bridge over river, arch 20 ft. above water-level.

LIYANGHSIEN, P. T. (see *Gazetteer*). South suburb begins on l.

61½ South Gate of city.

62 West Gate.

The river flows round the city, forming a moat, whilst another channel flows under water-gates from W. to E. The three branches reunite at the SE. corner of the city. Moat about 20 yds. wide and 7 ft. deep, and passes under low stone arches, about 11 ft. above water-level, at the four city gates. Channel through city passes under E. and W. water-gates, about 14 ft. above water-level, and under one high stone bridge in centre of city, and two low stone bridges about 10 ft. above water-level just before reaching E. water-gate. This channel through city is 12–15 yds. wide. There is a three-storied pagoda over E. water-gate.

A steam-launch goes to Wusih one day and returns the next. Steam-launches also run from outside the W. water-gate N. to Kintan Ku and W. to Ting-pu-chên (3¼ miles E. of Tung-pa).

Hills about 3 miles to SW. running S. At first 500–800 ft. high, but higher further S.; bare of trees.

Leaving W. water-gate, go W. through suburb. River 50 yds. wide, 8½ ft. deep. Many boats. After 600 yds. reach the *Shuang-ch'iao* (Sang-chiao), a double stone bridge, N. part with four piers, S. part with two stone piers, 14 or 15 ft. above water-level.

The *Kintan* (Chin-t'an) *River* (from Kintan Ku,

miles

90 li distant) from N., and a stream from NW., join above bridge and flow through northern bridge. The Tung-pa River coming from the W. flows through the southern bridge, and all three unite below the bridges.

Towing-path on r. at first paved with uneven slabs. In places barely room for two persons to pass. *Tung-pa River*, 40 yds. wide, 8½ ft. deep.

62¾ **Hsü-chu-ts'un** (Su-chü-ts'ên), 40 houses, ½ mile to N. Three-arch stone bridge over Kintan River ¾ mile to N. High hills in distance to the S. run in a southerly direction.

63½ **Hsia-ho-t'ou-ts'un** (Yo-ho-t'ei-ts'ên), 30 houses, on l.

63¾ *T'u Shan* (Tou Shan), 100 ft. high, on l. From it bare grass hills run S. and W., gradually receding and increasing in height.

A ferry. River 8½ ft. deep.

64½ *Wang-chia-ch'iao*, a wooden pile bridge over river **Hsü-chia-ts'un** (Su-ka-ts'ên), 40 houses, 200 yds. to N. River 8 ft. deep.

65½ **Wu-t'an-tu-ts'un** (Wu-t'uan-tu-ts'ên), 40 houses, ¼ mile to N. Wooden bridge over river. Hills to S. gradually recede.

66¼ **Chiang-tien** (20 houses, with shops and inns), on r. Wooden bridge over river. Towing-path now unpaved; 600-ft. hills 4 miles to S., running E. and W.

67¼ Wooden bridge over river. **Hsin-ch'ang-chên** (Hsin-t'an-tsên), 50 or 60 houses, ¼ mile to S. River 9½ ft. deep.

67¾ Wooden bridge over river to **Kan-hsi-ts'un** (Han-shih-ts'ên), 50–60 houses, ¼ mile to S. **Ch'ien-chia-yü-ts'un** (Chin-ka-yü-ts'ên), 40 houses, ½ mile to N. River 9½ ft. deep.

69¼ **Li-chia-cha** (Li-ka-za), 30 houses, on l. River 12 ft. deep. Wooden bridge over river. Towing-path again paved with broken slabs. River 11 ft. deep.

miles

70¼ River 70 yds. wide, with a low bank running parallel to it and 30 yds. from r.; 5½ ft. deep near r., 10½ ft. deep near l.

Hsiao-chin Shan, 100 ft. high, 1 mile to S. Hills to S. now a long way off. Towing-path again unpaved.

71¼ **Nan-tu-chên** (Lan-tu-tsên), over 300 houses, a busy market town on both banks, with narrow dirty streets. Here a war junk and wooden *likin* barrier across river above bridge, closed at nights. A single-arch stone bridge, 25 ft. above water-level, and 25 ft. wide; 8 ft. deep under it.

There is a road to Nanking, via Lishui, said to be 240 li (72 miles) by one account and 300 li (90 miles) by another.

Leaving Nan-tu-chên, river 100 yds. wide, 8 ft. deep. Unpaved towing-path on r.

71½ Reach *Nan-tu-tang* (Lan-tu-tang), a swamp (mostly reeds) with channel 2 ft. deep running round it. River runs through on S. side, lake ¾ mile wide from N. to S.

Chung-ch'iao-ts'un (Chêng-chiao-ts'ên), ¾ mile off at NE. corner. River 5 ft. deep for a few yards at exit of lake, then 8 and 9 ft. Path runs round N. side of lake. Two or three creeks come in on S. side.

72¾ Lake ends. River 60 yds. wide, soon 50 yds., and 8½ to 9 ft. deep by constant soundings for next 3 miles.

Lao-kan-tsui (La-kun-tsei), 10 houses, 300 yds. to N. Towing-path still on r.

73½ *Pa-t'ou-ch'iao*, stone bridge over river with centre arch 20 ft. high and 20 ft. wide, and two small side arches. Paved slope over it, 31 yds. long. River 40 yds. wide.

73¾ *So-t'o-miao*, small temple on r. Towing-path crosses side-creeks by low stone bridges. River 35 yds. wide.

74½ Towing-path crosses side-creek by a wooden pile bridge.

miles

The side-creek goes to **Ch'iang-pu-chên** (Chang-pu-tsên), village of 75 houses, 1 mile WNW.

Ch'ien-shih-ts'un (Ch'ien-su-ts'ên), village of 40 houses, ¼ mile to ESE. High hills 9 miles to W. Direction of route, SSW.

75 **Ch'ien-k'ou-tang** (Ch'in-k'ou-tang), 16 houses, on r. River 40 yds. wide.

75¼ **Ch'ien-k'ou-chên** (Ch'in-k'ou-tsên), 30 houses, on r., with wooden pile bridge over river on four trestles. Centre span 30 ft. high and 30 ft. wide. Towing-path on l. River 30 yds. wide.

75¾ River enters *San-t'a-tang* (called Ch'ien-k'ou-tang on E. side). The lake is really a swamp with reeds (used for forage), mostly only a few inches under water, with channels cut through in various directions. It is 2½ to 3½ miles wide from N. to S. The river runs through it (WSW.) to Ho-k'ou-chên, 6½ ft. deep at first, then 7–7½ ft. deep, occasionally 8 ft., deepest about 10 yds. from l. River flows easterly.

Single stones, about 10 ft. high, mark channel at intervals of 500 or 600 yds. along r.

A path runs on N. side of lake to Ho-k'ou-chên, said to be 20 li (6 miles) by land.

Low foothills on N. and S. sides of lake.

77 Arch of broken stone bridge over side creek on l.

77¼ Towing-path along l. Ground to S. now 1 ft. above water, and a little rice grown in places.

79½ **Ho-k'ou-chên** (Ho-kei-tsên), 35 houses, at entrance to lake, with stone-arch bridge over river, centre arch 25 ft. high and 30 ft. wide, and two small side-arches. River 8–10 ft. deep.

T'ang-chia-ch'iao is to the NW. of Ho-k'ou-chên, and said to be 18 li (4 or 4½ miles) [1] distant, but the river does not pass it.

[1] According to War Office MS. map of South Kiangsu the distance is less than 3 miles.

miles

Go S., towing-path along r. River 45 yds. wide, 9½ ft. deep.

After 600 yds., creek going NE. to A-tzŭ-chiang, 1 mile off.

River embankment 20 ft. high on r., 15 ft. high on l.

80½ Reach the *Ting-pu-tang* (marked Shêng-ping-tang on maps, these lakes, like the rivers, having many local names), a lake, or rather, swampy ground with channels through it. It is about 4 miles from N. to S., and 3 miles from E. to W.

One channel goes S. through centre to Shê-chu-chên (Sa-chu-tsên), 15 li off.

River goes along W. side, embankment 100 yds. distant from it. Towing-path on l., where ground is 2 ft. above water. River 5 and 6 ft. deep.

80¾ **Shih-chia-t'ou-ts'un** (Su-ka-t'ei-ts'ên), 10 houses, on r. River 50 yds. wide, 6½ and 7 ft. deep.

81 A channel runs along W. side of lake. Leaves lake and winds W. between 15-ft. embankments. Unpaved towing-path on r., a few low hills 5 or 6 miles to W. River 40 yds. wide, 7 ft. deep.

81½ Turn SW.

82¼ River 7 ft. deep. A ferry. Not many side-creeks.

83¼ Bend S., rising ground (30 ft. high) ¾ mile to W., running N. and S., with small clumps of fir.

83¾ Rope ferry across river.

84½ **Kuan-yin-chuang** (Ku-yin-tsang), 15 houses, on l. River 35 yds. wide and 7 ft. deep.

84¾ Bend WSW. Embankment on r. 6 ft. high.

85¼ **Wei-ts'un** (30 houses), 300 yds. from r.

85¾ Slightly rising ground 200 yds. to N.

Country on l. now higher. Embankment 6 ft. above river. River 35 yds. wide, 7 ft. deep.

86½ Banks again 15 ft. high, river 7 ft. deep. Slightly rising ground with some fir trees ½ mile to S. Turns W.

87½ **Ting-pu-chên** (said to be over 1,000 houses), a dirty

miles

town with narrow streets, following chiefly along r. It is unwalled. There is a *likin* barrier below the town. River is crossed by three stone bridges ; first one on two piers (centre arch 18 ft. high, 18–20 ft. wide), second bridge on four piers (centre arch 14–16 ft.), third bridge on four piers (centre span 14–15 ft.). Here wheelbarrows are plentiful, and one pony was seen. Country now 12 ft. above river, which is 30 yds. wide.

88¼ Bend NW. Small clumps of fir dotted about. Very slight current in the river.

88½ River 6½ ft. deep.

89 Country slightly undulating. Turns W. Soon a ferry.

89¼ **Hua-yeh-mên-ts'un** (50 houses), ½ mile to r. River 25 yds. wide, 6 ft. deep.

90 Cross stone bridge of two piers over side-creek, going NE. Paved towpath on r. River 7 ft. deep.

90¾ **Hsia-tung-pa-chên** (about 200 houses) on r., a dirty little town with shops. Opposite the town is the Lower Barrier (*Hsia-pa*). This is a dam across the river, completely blocking it up. Paved steps lead down on each side, the lower river being some 24 ft. below the level of the upper canal. This lower barrier has a paved roadway 7 yds. wide at the top of the dam, from which 11 steps (more under the water) lead down to the canal to the W., and 52 steps (more under the water) to the Tung-pa River on the E. When visited, this roadway was some 6 ft. above the level of the canal and 30 ft. above the Tung-pa River. It is stated that big boats cannot be hauled over, but small boats are taken over by covering the steps with mud. However, if it were really necessary to haul over a big boat, it could probably be done. Small boats can be hauled over the dam. A slight overflow from the upper canal flows by a small creek about 100 yds. S. of the dam and eventually joins the

miles

Tung-pa River. River 7 ft. deep below the dam. A temple, *Ta-wang-miao*, projects into the river from the r. Boats can anchor close up to the dam. The Barriers date from the Ming dynasty and consist of a canal 3 miles long, running nearly due E. and W. and completely dammed up (except for small overflow creek near the Lower Barrier) at both ends. There is no stream in the canal or Upper Tung-pa River, and the water is rain-water. It is stated that the Tung-pa River is not affected by ice.

From the Lower Barrier (Hsia-pa) to the Upper Barrier (Shang-pa) the direction is a little S. of W., the paved footpath running near the S. bank of the canal, well paved with slabs laid crosswise. Numerous wheelbarrows. Low rolling country, partly grass, partly cultivation. A little kaoliang. Fir clumps dotted about. The canal goes through a cutting. There are about 70 or 80 small boats on it, called *po-tzŭ-ch'uan*—long, low-lying, open boats, the small-sized about 45 ft. long and 2 ft. wide and drawing 1 ft. 8 in. when full. They can carry 80 *tan* (about 7 tons). The large-sized draw 2 ft. 8 in. when full. The canal usually freezes once or twice annually for two or three days, but the ice can easily be broken. In December, 1906, it was frozen for two days.

Small boats can go all the year, but the larger size can usually go only in the winter. Two or three small creeks drain into the canal.

Leaving Hsia-tung-pa-chên, go W. Canal 70 or 80 yds. wide, 12½ ft. deep (soon 7 ft.); embankments 16 ft. high. Water slightly muddy.

91 **Wei-chia-ta-ts'un** (60 houses), on north bank.

91¾ Embankments 20 ft. high. Canal 3 ft. 6 in. deep near S. bank.

92 Canal narrows to 20 yds., and gradually to 15 and 10 yds., 4 ft. 9 in. deep.

miles

92¼ *Wu-li-t'ing*, a temple, on S. bank. Cutting now 50–70 ft. deep, and 60–80 yds. wide, mostly given up to paddy-fields, 1 or 2 ft. above level of canal, which is 10 yds. wide, 3 ft. 6 in. deep. Apparently the canal has been allowed to fill up, or else the original cutting was not completed. Canal soon mostly 6 yds. wide, and 2 ft. 9 in. to 3 ft. deep. Only smaller boats can pass each other, larger size having to wait where canal is wider. One or two nullahs run S.

Yu Shan (hill), with white temple 6 or 7 miles to NNW.

93¾ **Shang-tung-pa-chên** (300 houses), another dirty little town with narrow streets. Here is the Upper Barrier (*Shang-pa*), another dam blocking exit of canal, with paved roadway across top and paved ramp (with 7 steps on E. side) running down on each side.

Leaving the Upper Barrier, towing-path along l. of the *Kucheng River*, which flows E. At first 10 ft. deep and 40 yds. wide, soon 70 yds. wide, and near l. soundings gave 9–11 ft. with occasionally 7 ft. Surrounding country undulating on r. Direction westerly. Soon 10 ft. embankments on l. Towing-path 2 or 3 ft. wide and unpaved. Lower ground chiefly rice.

94½ *Chih-lung-ko* (Ssŭ-lung-ko) Temple, built into river from r. Undulating ground to S. recedes, paddy-fields near l.

95 **Wu-chia-tzŭ** (20 houses, partly of stone, partly mud hovels), on l.

95¼ Lake formed by rain-water, 1 or 2 ft. deep and ½ mile wide (N. to S.), begins on the S., 30 yds. off. It is surrounded by a 10-ft. embankment, with a creek from river running round outside. **Hsia-chuang** (10 houses) with a ferry.

miles

96¼ **Shuang-ho-k'ou** (4 houses). First lake ends. Pile bridge over creek between embankments separating it from second lake, which is also ½ mile wide, and 1–2 ft. deep, and only separated from the river by the 10-ft. embankment. Undulating ground to S. of lake. Two similar but smaller lakes separated from river on r. by a 10-ft. embankment.

97¼ Another creek crossed by a pile bridge between the embankments of second and third lake, which latter is ½ mile wide, 2 miles from E. to W., and 3 to 3½ ft. deep, and separated from river by the 10-ft. embankment. No communication between waters of lakes and river. **Ch'ien-ts'un-tu** (Hsie-ts'un-tu), 20 houses, on r. with a ferry. **Chang-wei-ch'iao** (Tsang-pu-hsiao), 50 houses, 1½ miles E. of N.

98¾ 300-ft. grass hill ½ mile to N. *Hsiu Shan* (bare grass hill, 500 ft. high) ½ mile to S. on border of lake. From it broken hills run S.

Lao-hsiang-wu (La-hsiang-kŭo), 30 houses, on r.

99¼ **Kucheng Ku,** P. (over 500 houses), a straggling town with narrow dirty streets on r. River opens out to a landing-place opposite on l. Only 5½ ft. deep near l., it then narrows to 50 yds., again opening out with a small bed of reeds growing in the centre of the stream. The town lies near the NE. corner of *Hsiao-nan Hu* (marked Kucheng Hu on maps). The Kucheng River and Hsiao-nan Lake do not freeze in winter.

Proceed N. of the small bed of reeds and S. of a ruined lighthouse ; channel 8 and 8½ ft. deep. Then NNW. through channel 40 yds. wide, 7½ ft. deep between shallows.

99½ Enter the *Hsiao-nan Hu*, a lake said to be 6 miles from N. to S. Country to N. flat or slightly undulating, hills on E. side. High hills in distance to S. Villages plentiful to N. Lake 8 ft. deep. Current here to E.

miles

100½ **T'ou-tê** (T'ou-tei), 30 houses, 1 mile off on N. bank. 9 ft. deep.

101 **Hsin-chao** (Sin-tsao), 1¼ miles to N.

103¼ Small joss-house on strip of land running down to lake from N. Depth 6 ft. close up to W. side of it. Kaoshun pagoda ½ mile to N. 7½ ft. deep within ¼ mile of N. bank, but shallows close in.

103½ **Kaoshun,** P., a small unwalled city (1,789 houses), very narrow with undulating ground behind it (see *Gazetteer*). Situated at NW. corner of the lake (where river enters) and protected from the lake by a 10-ft. embankment which extends ½ mile to south of it, enclosing a lake formed by rain-water. 7½ ft. deep 30 yds. south of embankment, and deeper in channel 30 yds. farther S. This channel runs between reeds which stretch away to the S.

104½ Enter river, 60 yds. wide, 10 ft. deep.

105¼ Kaoshun bridge. A fine stone bridge with 7 arches, large centre one 18–20 ft. high and 20–25 ft. wide. Bridge 7 yds. wide and about 60 yds. long, paved with slabs, stone balustrades nearly 3 ft high. 13 steps lead up to it on N., and 9 on S. side.

Salt junks from Chinkiang come up to Kaoshun via Taiping An, which is a deeper route than the one to Wuhu.

Leaving Kaoshun, follow down r. bank of *Kaoshun River*, which flows W. between 10–12 ft. wide embankments, unpaved and liable to be heavy. Country on each side low-lying and flooded all the way to Ts'ang-hsi, protected from river and side-creeks by high embankments. Villages plentiful, mostly 400–500 yards distant on either side.

River 50 yds. wide, 9 and 10 ft. deep.

After 600 yds., creek going 200 yds. to N., and then turning E. leads into a harbour for salt junks in Kaoshun.

miles

$105\frac{3}{4}$ Small island. Channel goes to S. of it.

$106\frac{3}{4}$ **Hsia-kêng** (Hsia-kei), 30 houses, on r. River 11–13 ft. deep.

$107\frac{1}{4}$ Towing-path now 4 ft. wide. Towing-path also on l.

$107\frac{3}{4}$ River opens out to N., deepest near l., $7\frac{1}{2}$ ft. deep near centre.

108 **Chuang-t'ou-tsui** (Chuang-t'ei-tsei), 30 houses, 100 yds. from r. Here river bifurcates.

Smaller channel continues straight on (NNW.) to T'ang-kou, $4\frac{1}{2}$ miles off.

Main channel turns at right angles (WNW.), 50 yds. wide and 9 or $9\frac{1}{2}$ ft. deep, between 12-ft. embankments.

109 **Liu-kêng-chiao** (Liu-kei-kua), 50 mud huts, on r.

Hence an unbridged creek 35 yds. wide goes NNW.

Country continues flooded.

$109\frac{3}{4}$ **Ts'ang-hsi** (Tsan-hsü) (over 500 houses), a small town with paved streets and shops on l., and a small harbour where river opens out. No missionaries here. Continue NW., towing-path on l. (also on r.) of Kaoshun River, on 12 to 15-ft. embankments, 3 or 4 ft. wide on top, and occasionally paved with broken slabs in the centre. River mostly 50 yds. wide, sometimes shrinking to 30 yds., sometimes opening to from 70 to 100 yds., $8\frac{1}{2}$ ft. deep, soon 10 ft. deep.

$110\frac{3}{4}$ **Chang-chia-ts'un** (Tsang-chia-ts'un), 40 houses, on r.

$111\frac{1}{2}$ **Hsiao-ch'iao-wan** (100 houses), on l.

$111\frac{3}{4}$ River 5 ft. deep for 300–400 yds.

112 Small island in channel, $7\frac{1}{2}$ ft. deep on each side of it. After 300 yds., another small island.

$112\frac{3}{4}$ River 11 ft. deep. Cross stone bridge, arch banked up. Here the Kaoshun River joins the *Sha Ho* (Sa Ho).

Coming from the S., the main branch runs N. and then NW., crossing a waste belt of land (called the

miles

Hsi Hu or Western Lake) and flowing into the Yangtse at Taiping An, whilst a small channel continues NE., skirting on the E. side of the waste land.

Taiping An is said to be 30 miles distant, and this is an important channel 50 yds. wide, up which small salt junks come from Chinkiang.

The Hsi Hu is a broad belt of waste land, here about 3 miles wide, without cultivation, and running up the E. side of the Sha Ho to this spot. It is said to extend S. to Ningkwofu, and from here N. or NE. for another 60 li. In places it is under water, and it is usually about 2 ft. above the level of the Sha Ho without any embankment between.

On the W. side is a smaller channel by which small boats can go from Wuhu to Taiping An in the autumn, and this channel is bounded on the W. by an embankment, with villages.

Towing-path continues along embankment, 15–20 ft. high and 6–10 ft. wide (paved through villages), on r. of the Sha Ho.

113 **Hsiao-hua-liu-chia-ts'un** (50 or 60 houses), on l. Sha Ho 150 yds. wide, but soon narrows to 60 or 70 yds., though often wider opposite villages, when there are usually banks in channel near r. River 13–15 ft. deep, often deeper.

113½ **Ta-hua-liu-chia-ts'un** (over 300 houses), on l.

114¾ **Lung-t'an** (Lung-tü), 120 houses, on l.

115¾ **Hsi-tou-mên** (Hsi-tei-mên), 50 houses, on l. Here leave the Sha Ho coming from Ningkwofu (130 li to S.), and go west down another branch (the *Kuei-hsi River*) which flows W., winding across the Hsi Hu. It is 50 yds. wide, 15 ft. deep or more, between banks 2 ft. above water. Towing-path along r. (only a track). The Sha Ho, flowing N., is the boundary between the provinces of Anhwei and Kiangsu.

miles

119½ Reach small channel (liable to be dry), with embankment 15–20 ft. high. Coming from W. it runs N. to Taiping An, bounding Hsi Hu on W.

Ku-chia-tu (Kuo-chia-tu), 30 houses, 100 yds. N. of where embankment turns N.

Proceed W. along embankment on r. of Kuei-hsi River, channel 50 or 60 yds. wide, but often opening out; beyond channel a belt of waste land 200–300 yds. wide, with a channel on S. side and S. of embankment of river beyond. Towing-path 5 ft. wide at top and unpaved. Country to north of embankment and in distance to S. of embankment low-lying and flooded. Many villages.

120¼ Embankment winds round a semicircular bend, enclosing some waste land to N. of channel, rejoining river at Wu-hsi.

121 **Wu-hsi** (Wu-ch'ih), 450 houses, on r. No mission stations. There was, in 1907, one war-junk belonging to the T'ai-p'ing Fu Shui-shih Ying.

Continuing along r. embankment, road on top 6–10 ft. wide. River between 20-ft. embankments, with belt of waste ground between channel and l. embankment, and small channel on S. side. Below Wu-hsi an opening from smaller channel into main channel.

122¼ Main channel winds near l. embankment with waste strip near r. River 10 ft. deep.

123¼ Channel near r. embankment.

123¾ River 11½ ft. deep.

A channel from Ningkwofu, 90 li (27 miles), comes in from S., but steam-launches from Wuhu go via Wu-hsi.

Main channel again near l.

125¼ **Hwangchih** (Wang-ssŭ), P. (one account says 600 houses, another says 900, some houses of stone), with paved narrow streets and shops. A ferry. Town

miles

mostly on r. 100-ft. hills running E. and W. for ¾ mile about 1 mile to S. Waste strip alongside river ceases for a short distance.

126 Waste strip again near l., 100 yds. wide, and opening out at one place to a mile. Level of waste 3 ft. above river.

127½ **San-li-kêng** (San-ni-kên), 40 houses, on both banks. A ferry.

The *San-ch'a Ho* (San-tsao Ho), 50 yds. wide (here crossed by a ferry), flows N. to Taiping An, 60 li (18 miles) distant, but it is shallow.

Wuhu hills now visible to W.

River 50 yds. wide, 10 ft. deep; r. embankment now several hundred yds. to N. with waste strip, 8 ft. above river-level, between it and main channel. Towing-track along waste; l. embankment near river.

128½ River 8 ft. deep.

130 **Ch'iao-t'ou** (Chiao-t'ei), 30 houses, on l. River 150 yds. wide, and only 2½ ft. deep for about 200 yds. Big boats can only pass when the river is high.

130½ River makes a big bend round to S. **Mu-ch'iao-t'ou** (Mo-chiao-t'ei), 40 scattered houses, on r. River winds S.

130¾ **Lo-p'êng-wan** (La-pêng-wa), 30 houses, on l. River winds N.

131¼ **Chiao-t'ou** (Chiao-t'ei), 15 houses, with inns, on r., to S. of embankment.

Waste land with reeds and some marsh stretches away to S. along l., 6–8 ft. above water-level. Country to N. cultivated and not flooded. River 8 ft. deep.

132¼ **Wan-ch'ing-hu** (Wang-shêng-hu), 80 houses, straggling village below r. embankment. Here river only 3½ ft. deep for about 600 yards. Steam-launch for Ningkwofu could not pass, and had to disembark passengers.

After 600 yards 7 ft. deep; deepest near r.

miles

133¾ Embankment on r. 290 or 300 yds. from river, with belt of reeds between.

135 **Ch'ing-shui-ho** (40 houses), on r.

Here branch of river goes S. to Wan-chih (Wan-tzŭ), 50 li distant.

Embankment on r. with road winds 600 yds. away from river; reeds and some cultivation between. Towing-track near river 6 ft. above water.

135½ Embankment on l. near river, which is 50 yds. wide, soon 70 yds., and over 15 ft. deep. Swifter current.

136¼ 3 or 4 bare grass hills (*Chin Shan*), 200 and 400 ft. high, near l.

136¾ River bends N.

137 **Chung-t'an-k'ou** (Chung-t'ang-kei), 30 houses, on r. River 50 yds. wide. Embankment on r. again near river. Roadway very uneven, only 5 ft. wide.

Country low-lying and in parts flooded.

137½ River 60 yds. wide. Embankment on l. 50 yds. from river. River over 15 ft. deep. Unbridged creek flowing N., just before reaching Fu-chia-tien.

138¼ **Fu-chia-tien** (P'o-chia-tie), 30 houses, some of stone, on r. A *likin* station and a ferry. Undulating country near l. bank, with some reeds. Country to N. much flooded, with many villages.

138¾ *Wuhu Hills*, 200 ft. high, begin 2 miles to N. and run SW.

139 Embankment bends S. for a short way with river, another road (a short cut) leads across the fields due W. past **T'ang-pao-ts'un** (30 houses), 600 yds. off. Embankment now 4–8 ft. wide. Ferry 200 yds. further on. River 80–100 yds. wide.

140¼ Short cut rejoins embankment. Cross single-arch stone bridge over side-creek. Four-storied oil works (*T'ang-hsin-kung-so*) and chimney on r. Paved street and houses begin. River deep and 60 yds. wide. 12-ft banks. Towing-path for short way along r.

miles	
141¼	Railway bridge across river, here 50 yds. wide.
141¾	**WUHU,** P. T. RS., small walled city with important suburbs extending to the banks of the Yangtse. Bridge of boats opposite South Gate (100 yds. to N.).
143	Bridge across river. Suburb mainly on r. (See Route 18.)
143½	The *Kuei-hsi River* (Yang-ki Ho, also called Wuhu Creek by foreigners) joins the Yangtse, which is a mile broad at this point. Pagoda near the junction.

ROUTE 17

CHINKIANG TO NANKING

Authorities: Richthofen, vol. iii, 1912; A. H. Hilton-Johnson, Dec. 1906-Jan. 1907; War Office MS. Map of S. Kiangsu, 1907.

General direction W. The most direct route is by steamer on the Yangtse (see Chap. VII), or by the Shanghai–Nanking Railway (distance by rail 43 miles).

In addition there are two land routes:

(A) Via Kaotze (42 miles)

This is the direct land route. It is generally straight and level, and is classed by natives as a main road. Its nature varies from a cobble-paved track 4 ft. wide to a beaten mud footpath. It is passable for animals and wheelbarrows (although infantry would often have to move in single file), and, except after heavy rain, the quality of the road is good throughout. The passage of guns would always be attended with much difficulty, and would necessitate the frequent employment of spare teams and advanced working parties.

The country is hilly. For about 25 miles the route lies along the foot of hills on the left, the country on the right between the road and the south bank of the Yangtse River being mostly low-lying paddy swamp, impassable except by footpaths. After 25 miles the country is more broken. It is

well wooded on the hills, and there is much uncultivated grassland. Most of the hills are covered with dense prickly bushes or very long grass; except along difficult paths they are almost impassable. There are very few creeks, and beyond Shih-p'u-ch'iao the country is mostly dry and passable for mounted troops. Water is plentiful, and troops could camp practically anywhere along the route. Up to Ch'a-lu-k'ou the Shanghai–Nanking Ry. follows the route at a distance of a few hundred yards, lying chiefly on the right of the road until near Shih-p'u-ch'iao where it crosses to the left.

A creek from Chinkiang runs westward almost parallel to the road for some 30 miles, then turns into the Yangtse River. It is navigable in summer but very shallow in winter.

For remarks on transport and on the probable amount of the various classes available see Chap. V.

miles	
0	**CHINKIANG,** P. T. RS. (see *Gazetteer*). Route leaves from *West Gate* through crowded W. suburb for ¾ mile to **British Concession,** thence SW., crossing Shanghai–Nanking Ry. line at mile 1¼.
	An alternative route to avoid W. suburb, is from neighbourhood of SW. corner of city along railway embankment.
	Thence route follows l. of railway, between line and low wooded hills.
4¾	**Êrh-shih-li-p'u,** situated on a creek to N. of railway.
8¾	**Kaotze,** P. T. RS., market town (800 houses).
	Before entering the town the road crosses a stream flowing S.–N. into the Yangtse River. At high tide it is navigable from the Yangtse to a stone bridge 1½ mile S. of the town.
	The railway station is NW. of the town.
11½	**T'an-chu-chên** (T'an-t'u-chên), RS., market town (250 houses).
12¾	**Kiaotow Ku** (Ch'iao-t'ou), P., market town (250 houses).

miles

15½ **Siashukai** (Hsia-chu-chieh), P. RS., market town (200 houses) with wooded hills N. and S. of it, giving good camping-grounds. Station about 1 mile W. of town.

General direction W. Route keeps between railway on r. and hills on l.

16¾ **Hsü-chia-chuang,** ¼ mile S. on a creek.

18½ **Tsangtow,** P., market town (400 houses).

20½ **Shih-liu-yüan.**

23¼ **Lungtan Ku,** P. T. RS., market town (500 houses) at the foot of *Lung Shan.* From the town tracks follow both sides of creek, that on N. side is a path 2 to 3 ft. wide on top of a bank 10 to 20 ft. high, with marshy country on r ; it is better for men, animals, and wheelbarrows than path on S. side of creek, but is too narrow for double-track vehicles. Creek is crossed by a bridge at the town.

An alternative route from here goes SW. through Tungyang Ku, P., a market town of 500 houses, then W. via Yang-chuang and other villages, joining main route at Kan-chia-hsiang. It is about 1 mile shorter than main route, but not passable for vehicles other than wheelbarrows.

Beyond Lungtan Ku a stream flows S.–N. into the creek ; it is navigable for small boats as far as Tungyang Ku.

26 **Hua-chia-ts'un.**

27½ **Chihshantu** (Shih-shan-tu), P., market town (100 houses). Route passes at the foot of the *Hsi-hsia Shan* (Se-kea Shan), about 900 ft. high. To the S. of it, i.e. about two miles from the r. bank of the Yangtse, is Tan Shan (Single-tree or Lone-tree Hill), a landmark for ships coming up the Yangtse River. On this hill there was formerly a single tree, hence its name. A fine view, extending as far as Chinkiang in the east and Nanking in the W., is obtained.

miles	
28¾	**Lone-tree Hill,** RS. Route crosses to the r. of railway line, and continues on that side as far as Ch'a-lu-k'ou.
29¾	**Shih-p'u-ch'iao,** market town (300 houses) on the banks of a creek 15 yds. wide. General direction, W. Route lies on top of bank for nearly 1 mile, then on ground-level passing *Yü-ssŭ-miao* temple on l.
31¾	**Kan-chia-hsiang,** market town (150 houses).
35¼	**Yao-fang-mên,** market town (150 houses).
37¼	**Ch'a-lu-k'ou,** market town (100 houses).
39¼	**Chiang-wang-miao.** Before reaching this place, route crosses again to l. of railway.
42	**NANKING,** P. T. RS. (see *Gazetteer*). Route enters through *T'ai-p'ing Mên,* a gate in the NE. wall.

(B) Via Tanyang (about 70 miles)

This is an indirect land route. It is generally straight and level, and is classed by natives as a main road. Its nature varies from a track 5 to 15 ft. wide, down to a footpath of beaten mud. It is intermittently paved with uneven stone flags of irregular shape and size; these are roughly laid in the centre of the track, and are much broken and rutted from long usage, so that they tend to reduce all normal rates of progress. It is passable throughout for animals and wheelbarrows, although infantry would often be forced to move in single file. The passage of guns would be attended with much difficulty and would necessitate the frequent use of spare teams and advanced working parties.

The country is hilly for the first 7 miles, then for 15 miles is a flat, open plain, with an extensive view in all directions; it then becomes undulating, forming a long succession of valleys running N. and S.; near Nanking it becomes more

broken and hilly. It is sparsely wooded and not thickly populated ; in the plains it is highly cultivated, but elsewhere much grassland exists. There are comparatively few creeks, and, generally speaking, the land is dry and passable for mounted troops. Pond water is plentiful. Troops could camp almost anywhere along the route.

miles	
0	**CHINKIANG,** P. T. RS. (see *Gazetteer*). General direction, SSE. Route leaves from *South Gate* and lies through S. suburb ½ mile. It is paved for the first 3¼ miles.
1¼	**Wu-fêng-k'ou.**
2¼	Route crosses the railway.
3¼	**Kuan-t'ang-ch'iao,** town (300 houses). Route follows a mud track.
	The paved road goes SSW. to Mao-san, 40 miles distant.
7½	**Lu-ts'un.**
8	**Fang-mien.**
9¾	**Ma-ling,** market town (100 houses).
14	**Ting-ko-chuang,** town (200 houses).
	A fair by-road impassable for wheeled vehicles goes W. to Po-t'u.
	Route turns l.
15	**Hu-t'ou-chên,** market town (100 houses), with forge. From here route follows a paved track 10 yds. wide with *Lien Hu* (Lieh Wu, a lake, also called Tanyang Hu) on l.
16¼	**TANYANG,** P. T. RS. (see *Gazetteer*).
	The city can also be reached by the Shanghai–Nanking Ry. or by the Grand Canal (see Route 1 A).
	Route follows NW. wall of city, then turns r. along road known as the *Ching-lu.*
24¼	**Ch'ün-chou** (or Ch'ü-tei), scattered market town of 500 houses.
?	**Ting-chuang-p'u,** town (700 houses).
?	**Têng-tien** (Tên-ti), town (200 houses).

miles	
29	**Po-t'u,** scattered market town (400 houses). Route lies over open undulating country.
33½	**Hsing-hsiang** (or Hên-ya), market town (250 houses). From here the main paved road continues to Küyung with no important places *en route*. The road is bad for both men and transport, and particularly for wheelbarrows. The by-route lying to the N. of the main route via **Tsa-ch'i** (250 houses), **Ch'ien-ma-ling** (100 houses), and **Hsia-tien** (100 houses) is therefore recommended except for vehicles other than barrows, or after heavy rain. It consists of a beaten mud footpath, 2 to 3 ft. wide, passable for men, animals, and barrows.
43	**KÜYUNG,** P. (see *Gazetteer*). Route leaves by *West Gate*.
49½	**Tukiao,** P., market town (2,000 houses).
53½	**Soshu,** P., market town (500 houses).
58¼	**Hsiung-huang-chên,** market town (400 houses). General direction, NW.
62¼	**Shang-fêng** (called Shan-shui-kuan on French and German maps), market town (400 houses).
64¾	**Kaokiaomen,** P., market town (400 houses).
70	**NANKING,** P. T. RS. (see *Gazetteer*). Route enters by the *T'ung-chi Mên*, a gate in angle of SE. wall.

ROUTE 18

NANKING TO WUHU (ANHWEI) (about 53 miles)

Authorities: French Map, 1901; German Map, 1901; Admiralty Chart No. 2678, Feb. 1915; Military Report on Anhwei, 1905.

General direction SSW. The most direct route is by steamer up the Yangtse River (see chapter on Yangtse River). In the near future Wuhu will be connected by rail with Nanking, either directly or more probably via Ningkwofu.

(Branch-line, Wuhu–Ningkwofu, partly constructed; main line, Nanking–Ningkwofu, surveyed 1914. For details see Chap. IX, railway No. XIII.)

The main land route follows ridges of hills which run almost parallel to the bank of the Yangtse River as far as Tsaishih (mile 33). The country W. of the hills is liable to be inundated in summer. Beyond Taiping An (mile 41) a range of hills 1,500 ft. high runs in a SE. direction, some 5 miles inshore.

miles (approx.)	
0	**NANKING,** P. T. RS. (see *Gazetteer*). Route leaves by the *South Gate.*
6	**Sishankiao,** P.
8	**Tashengkwan,** P., to the r., at the mouth of a creek.
12	**Pankiao Ku,** P., village on a creek. **Ta-êrh-chi** to r. on the bank of the Yangtse.
19	**Chiang-ning-ssŭ.**
21½	**Shou-lung-t'ing** (Fr. map). Route crosses the Kiangsu-Anhwei boundary.
24	**T'ung-ching.**
33	**Tsaishih,** P., a walled town, situated on a low hill about 1,500 yds. from the Yangtse.
41	**TAIPING AN,** P. T. A prefectural city. Its population consists of 6,100 families. The wall is in very bad repair, and in many places scarcely exists. There are 13 *yamên*, one Protestant and one Roman Catholic Mission. After traversing the town, the main road passes over two large boat bridges of 18 boats each, across the *Taiping River* (or Shuiyang Ho), which here joins the Yangtse. This creek is 220 ft. wide and 20 to 30 ft. deep at this point, but soon widens to nearly ¼ mile. Swampy ground to the l. of road.
45½	**Ta-ch'iao** (Fr. and Ger. maps).
48	**Ta-chêng-pu** (Fr. map).

miles	
49	**Tao-yang** (Fr. and Ger. maps).
53	**WUHU,** P. T. RS., a well-known Treaty Port. Population estimated at 100,000. It is a busy and thriving town, and is admirably located for trade, owing to the excellence of its water communication. Important rice exporting dépôt (see Route 16).

NORTH KIANGSU

ROUTE 19

GRAND CANAL

Authorities: Chinese Maps; Gandar, Le Canal Impérial, 1894; W. R. Carles, The Grand Canal, 1900; Elg, Kaiser Kanal, 1903; Stenz, Kaiser Kanal, 1903; A. A. S. Barnes, 1904; A. H. Hilton-Johnson, March, 1908 (chief authority for Section I); China Maritime Customs Trade Reports, 1900–15; Richthofen, vol. iii, 1912; Map of the Rivers, Lakes, and Canals of N. Kiangsu and N. Anhui, Survey Students of N. Kiangsu, Oct. 1911; Imp. Japanese Rys. Official Guide, vol. iv, 1915.

For general description of Grand Canal see above, Chap. VIII.

(1) Chinkiang to Tsingkiangpu (111¼ miles)

Except across the Shaopo Lake, there is an unbroken path throughout on top of the bank, and towing is always possible. North of Liu-cha it is on the east bank, and affords a fair road, averaging 12 ft. wide, and passable for infantry, cavalry, animals, wheelbarrows, and bicycles. Wheeled artillery and carts could also pass if an advanced party of engineers were provided to make a few of the bad places practicable, and to widen slightly numerous small bridges over stone masonry flood-gates or spillways, usually 6 ft. (at most 10 ft.) wide in gap. South of the Shaopo Lake the path lies on the west bank only for 4 miles, then on both as far as Kwachow. Generally speaking, it is passable for infantry, animals, and wheelbarrows only, and not for double-track wheeled vehicles.

Large supplies of various kinds are obtainable at cities and market towns *en route*.

miles	
0	**CHINKIANG,** P. T. RS., Treaty Port (see *Gazetteer*). The Yangtse is crossed in a NW. direction.
3¼	**KWACHOW,** P. T., town of 2,000 houses, chiefly on l. bank of canal. Great part of the old town washed away by the Yangtse. Mouth of canal accessible at all stages of the tide. Canal much congested with boats.
6¾	**Pa-li-p'u,** village of 80 houses, on both banks.
10¼	**San-ch'a-ho** and **Yang-tzŭ-ch'iao,** villages on both banks, containing together 150 houses. At west end of villages is a very large and conspicuous temple.
	From here a river goes W. to Shiherhwei, P. T., a large market town on the Yangtse, about 12 miles distant. Another branch of the river goes to Icheng (see Route 36 C).
13¾	**Hsin-ho-wan** (20 houses). Route bends NE.
14¼	**YANGCHOW,** P. T., important city on W. bank (see *Gazetteer*). The canal approaches the *South Gate,* follows the south and east walls, passing three gates, the most important of which is the Ch'ao-kuan Mên, near the SE. corner, where the steam-launch jetties are situated. Canal much congested with boat traffic.
16½	*East Gate* of Yangchow. Up to this point a strong current is running S. (3 to 4 miles an hour).
17¾	Pontoon bridge. Barracks on east, opposite suburb of Yangchow on west.
19	**Yen-t'ing-tzŭ** (10 houses), on l.
20¾	**Wantowchen,** P., town (100 houses) on east. Here canal turns sharply N.
21¾	**T'ou-yao** (30 houses), on r.
22¼	**Wa-yao-p'u,** village (60 houses) on both banks. The canal becomes a natural river without embankments and passes through the *Shaopo Lake.* Water 3 feet deep in winter.
24½	**Ch'ên-chia-chuang** (70 houses), on l.
26¼	**Liu-cha,** village (80 houses) on east.

miles

Just below the village is a river going east to Taichow Ku (see Route 22).

28¾ **SHAOPO,** P.T., town (1;500 houses) stretching for 1½ miles chiefly along the east bank, which is here stone-faced. (According to accounts of 1910 the west bank of canal north of Shaopo had fallen into the lake, and the east bank was threatened with the same fate.)

30 **Shêng-chia-têng** (10 houses), on r.

31¼ **Ch'iao-kuan-pa,** village (100 houses) on both banks. There are two openings into the lake, which at this point draws nearer to the bank.

31¾ **Hu-hua-t'ang** (20 houses), on r.

35 **T'u-wan** (10 houses), on r.

36¼ **Lu-chên-so,** village (120 houses) on east bank.

41 **Êrh-shih-li-p'u,** village (100 houses) on both banks.

41¾ **Ch'ê-lo-chên** (or Ch'ê-lu), town (200 houses) on east. (Note.—Gandar and French Map divide this town into South and North : Nan-ch'ê-lu and Pei-ch'ê-lu.)

43¼ **Pa-li-sung** (30 houses) on r.

44½ **Wu-li-pa,** village (50 houses) on east.

45¾ **KAOYUCHOW,** P. T. (see *Gazetteer*). South Gate approached through an extensive suburb, chief business part of the city. Opposite the SW. corner of the city wall there are openings into the Kaoyu Lake on the left. Through these boats can reach the *Huai River* in high-water season (see Route 35). At this point the current sometimes flows north. The west wall lies for ¾ mile parallel to the canal and about 60 yds. from bank.

46¼ *West Gate* of Kaoyuchow. Suburbs extend north for about 2 miles.

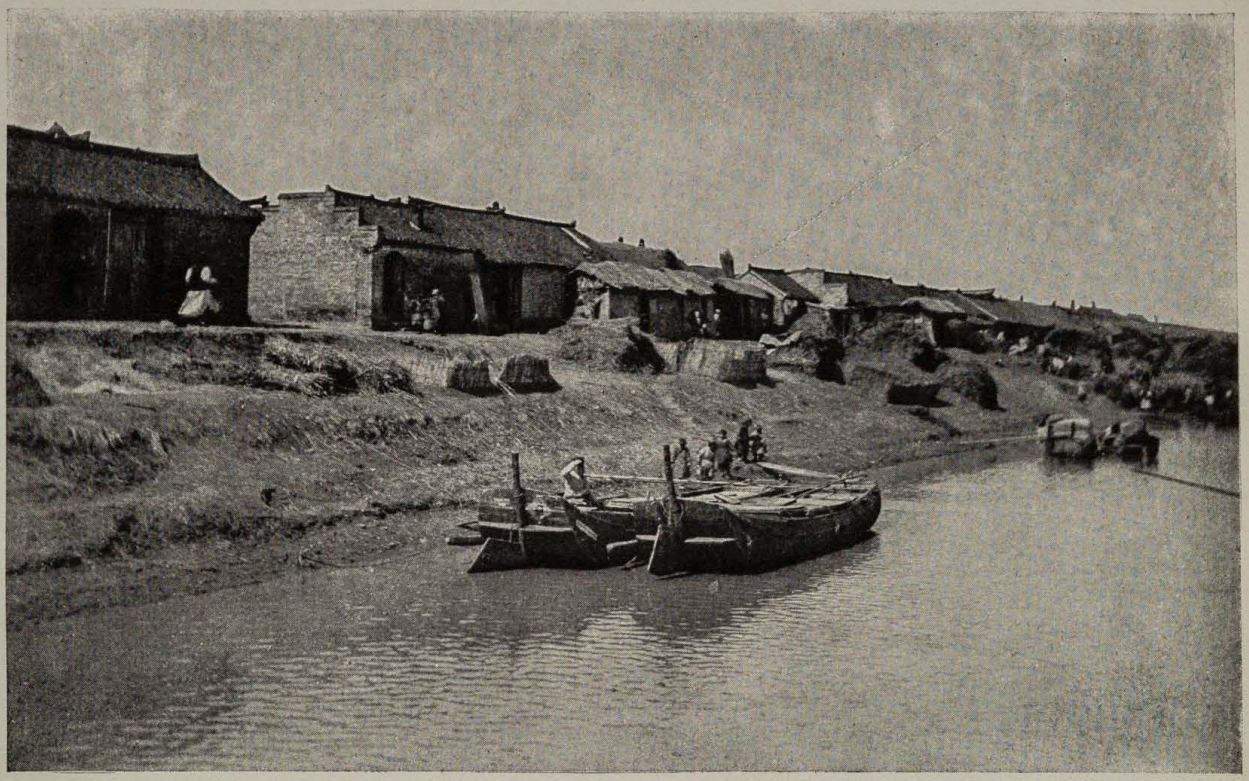
48 **Tan-ch'uan-lou** (20 houses), on r.

52 **Sha-chia-kou** (30 houses), on r.

53½ **Ch'ing-shui-t'an,** village (60 houses).

55¼ **Ma-p'êng-wan,** village (100 houses). There is an opening into the Kaoyu Lake (see Route 35).

miles	
56¾	**Chang-chia-kou** (25 houses), on r.
58½	**Liu-man-cha,** village (150 houses) on E. There is another opening into the lake.
60¼	**T'an-hua-tung** (40 houses), on r.
63¼	**Kaishow**(Chieh-shou), P., town (200 houses) on both banks. Further N. the canal is divided from the waters of the Paoying Lake only by its W. bank.
64½	**Tzŭ-chin-cha** (40 houses), on r.
65¼	**Ch'i-li-cha** (20 houses), on l.
67½	**Kang-ch'iao** (30 houses), on r.
70	**Fanshui,** P., town (500 houses) on both banks.
71	**Wu-li-p'u** (50 houses), on l.
72¼	**Ta-wa-tien** (60 houses), on both banks.
73¼	**Hsiao-wa-tien** (60 houses), on both banks.
75	**Liu-chia-pao,** village (100 houses) on both banks.
77	**Nan-yao** (30 houses), on r.
78¼	**Nancha** (20 houses), P., on l.
78¾	**Pai-t'ien-p'u** (40 houses), on both banks.
80¼	**PAOYING,** P. T., important city on east bank (see *Gazetteer*). *Great South Gate* approached through extensive suburb. On west bank mud-flats of the Paoying Lake end here.
80½	*Small South Gate,* on east bank. Wall of city lies parallel to canal, and about 50 yds. from it.
81	*West Gate.* Important suburbs spread to the N. on both banks, about 500 houses.
84	**Pa-ch'ien-chên** (50 houses), on l.
86¼	**Huang-p'u-k'ou,** village (40 houses) on r.
88	**Shuang-han-tung.**
89½	**Ta-ching-ho,** village (100 houses).
92¼	**Pingkiao,** P., village (200 houses).
93¼	**San-pao,** village (200 houses).
96¾	**Êrh-pao,** village (100 houses).
98½	**Shêng-chia-chuang** (40 houses), on l.
98¾	**Sha-chia-chuang** (50 houses), on l.
99¾	**T'ou-pao** (10 houses), on r.



TYPICAL MARKET TOWN ON THE GRAND CANAL, NORTH OF CHINKIANG

miles

101 **Yang-chia-miao,** village (150 houses) on both banks.

102¾ **HWAIANFU,** P. T., walled city on east bank (see *Gazetteer*). West wall lies parallel to canal and about 100 yds. from it. Pontoon bridge here. Beyond the walls extensive suburb known as **Hu-hsia** (1,000 houses).

Near the city important creeks leave canal on east, leading to Yencheng Ku (see Route 25 B), and to Powning (see Route 26 B).

106¼ **Wu-ch'ang-hu** (80 houses), on both banks.

107¼ **Huai-kuan,** town (500 houses) on east bank. Residence of the Hwaianfu Tao-t'ai (? Tao-yin), who also has a *yamên* at Tsingkiangpu.

110½ **Hsia-t'ang,** village (50 houses) on both banks.

111¼ **TSINGKIANGPU,** P. T. RS. (see *Gazetteer*). Boats pass through the mud walls of city and under a wooden pile bridge. They stop below the first lock (Ch'ing-chiang-chêng-cha), which is built of stone, with a bridge over it, and is situated about 200 yds. east of the NE. corner of **Tsingho** (opposite Tsingkiangpu).

(2) Tsingkiangpu to Tsining (Shantung)

(746 li, say 224 miles)

Less important than Section 1. The chief obstacles to navigation are: (*a*) the locks above Tsingkiangpu; (*b*) the scarcity of water during the drier season; (*c*) the silting up of the channel (much sand being brought from the Shantung mountains by the Tzŭ Ho, the Wên Ho, and many torrents); (*d*) the general state of neglect of embankments and locks. Some important repairs were apparently made in 1908.

There are several lakes and morasses bordering the canal, of which the line of demarcation is at times so confused that boats can travel across them leaving the line of the canal.

From Tsingkiangpu to Sutsien the canal runs parallel to the old bed of the Yellow River. Just below Taierhchwang it passes into the province of Shantung. Below Hanchwang it draws again very near the boundary of Kiangsu and follows it for several miles.

The Tsingkiangpu–Süchowfu Railway turns N. to Sipa, then W. to Yangchwang Ku on the Grand Canal (distance 9½ miles), where a bridge will ultimately be built.

In 1912, during the short time the line was operated, steam ferries ran in conjunction with the railway, and conveyed passengers and goods across the Grand Canal (see Chap. IX, railway No. X).

Up to mile 108 distances have been measured on North Kiangsu survey map. Beyond mile 108 distances may be less nearly approximate.

li	miles (approx.)	
0	0	**TSINGKIANGPU,** P. T. RS. To continue their journey north, boats have to pass two pontoon bridges and be hauled over four successive locks (each with an opening of about 22 ft.): Ch'ing-chiang-chên-cha, Lao-êrh-cha (or Fu-hsing-cha), T'ung-chi-cha, and—
15	6½	*T'ien-fei-cha* (or Hui-chi-cha), the most difficult of the four. The latter chiefly serves to break the strong current caused by the waters of the Huai Ho.
30	8	**Matowchen Ku,** P. The waters of the Huai River enter the canal from the south via Hung-tsê Lake. The latter can be reached by boat from the canal (see Route 35).
		Canal bends N. at sharp angle.
	12	Canal bends W. A stream continues NE. through the middle of the old bed of the Yellow River.
55	12¼	**Yangchwang Ku,** P. RS., on r. (Distance by rail from Tsingkiangpu, 9½ miles.) An impor-

li	miles (approx.)	
		tant railway bridge will cross the canal at this point.
	12¾	*Yen-ho-cha.* A lock separates the *Yen Ho* (No. 1) from the canal. The Yen Ho (No. 1) goes to Haichow (see Route 28 A).
	13	Canal bends S.
	14	Canal bends WSW.
	16	*Shuang-chin-cha.* The Yen Ho (No. 1) ends here ; a dam separates it from the Grand Canal.
	17½	**Tou-pan-chi,** on r. **Yen-ho-k'ou** on opposite bank.
	20	**Kao-chia-wan,** 2 miles S. of l. bank.
	22	**Yü-kung-pa,** 1½ miles SW. Canal bends NW.
	23½	**Shih-chia-ta-huang,** 1½ miles SW.
	25¾	**San-yi-pa,** on r.
	28¼	**Hu-chia-wan,** 1½ miles SW.
	28¾	**Shih-li-p'u,** on r. Canal bends W.
	32½	**T'ao-yüan-hsien,** walled town about 1 mile SW.
95	33	**Chunghing,** P. T., on r.
	36	**Yang-kung,** on l.
	37	Canal bends NW.
	41½	**Ch'ên-chia-yü,** on l.
	43½	**Ta-p'ing-chuang,** on l.
	44	Canal bends W.
	45½	Canal bends SW.
	47½	**Chêng-chia-lou.** Sharp bend WNW.
		Yanghwatsi, P., some distance away on the E.
135	51½	**Liu-lao-chien.** The *Liu-t'ang Ho*, a creek, cut off from the canal by a mud-bank, goes E. to Wu-chang-ho on the Yen Ho (No. 1) (see Route 28 A, mile 37¾).
	54	Canal bends WSW. **Ch'i-li-pei,** away on l.
	55½	Canal bends WNW.
	57¼	**Pan-pu-tien,** on r.

li	miles (approx.)	
	59½	**Hsiao-yang-chuang,** on r.; **Chang-chia-yü,** about 2 miles on l.
200	64½	**SUTSIEN,** P. T., a walled city on l., with a glass factory, a Protestant mission, and a Catholic (Jesuit) mission. Canal bends N. The main road to Peking via Ichowfu leaves the canal and continues NNE. (see Route 32 A). The road from Tsingkiangpu to Süchowfu crosses the canal, and from here runs parallel to the W. bank (see Route 33 B). Numerous swamps, especially along the E. bank.
	66	Canal bends W.
	66½	**Yuëh-hsü-ch'ang,** on r.
	70½	**Hsin-cha-tzŭ,** on r. Canal winds.
	72	**Chih-ho-k'ou,** on l.
	78	**Tsaoho Ku,** P. Canal bends NNW.
	81½	**Chung-cha,** on r.
	82¾	**Li-yün-cha,** on r. Canal bends NW.
	84½	**Min-pien-cha,** on r.
290	88	**Yaowan,** P. T. Near the junction of the *Yi Ho* with the Grand Canal.
	96	Canal bends NNW.
	97	Canal bends WNW.
	98	Canal bends NW.
	100	Canal bends WSW.
	101	Canal bends NNW.
	103½	*Lai-tao Ho* joins the canal on l.
	104	**Hsü-t'ang-chi** on r. at the junction of a branch of the Yi Ho with the canal.
	106½	A third branch of the Yi Ho joins the Grand Canal on r. after passing through the town of Pei-chou (distance by water, 7 miles).
350	(?)	**Lao-lung-t'an-chên.**
370	111	**Chia-k'ou-chên.**
385	115½	**Ku-liang-wang-ch'êng** (Liang-wang-ch'êng).

li	miles (approx.)	
	117	**Huang-lin-chuang,** on r. The canal passes into the Province of Shantung.
400	120	**Taierhchwang,** P. T. RS., terminus of a colliery railway connecting canal with Yihsien coal-fields and with Lincheng Sung on the Tientsin-Pukow line (see Route 31 A, sect. 3, mile 130¾, and Chap. IX, railway No. VIII). At this point the canal cuts through the lower spurs of Shantung mountains. The torrents which feed it are silting up the bed. Numerous locks, generally in bad condition.
418	125½	**Hou-ch'ien-cha** (Hou-shan-cha).
428	128½	**Tun-chuang-cha.**
436	131	**Ting-miao-cha.**
448	134½	**Wan-nien-cha.**
458	137½	**Chang-chuang-cha.**
466	140	**Liu-li-cha.**
472	141½	**Tê-shêng-cha.**

Instead of these localities Gandar mentions *Chü-liang-chiao-cha* and *Hsin-cha.*

496[1]	149	**HANCHWANG,** P. T. RS., large village of fisher-folk and traders. Copper mines in neighbourhood. Just before reaching the village the canal, which for the last few miles has been skirting the border of Kiangsu, is crossed by the Tientsin–Pukow Ry. At Hanchwang the canal enters again a series of lakes and swamps spreading between low undulating hills. The chief of these lakes is *Wei-shan Hu* (more usually called Yi-shan Hu, about 60 miles in circumference). A strong dam separates it from the canal. The main entrance to it from the canal is near Hanchwang. Boats often prefer this route

[1] According to Gandar the distance is only 478 li, but he certainly underrated the distance from Taierhchwang to Hanchwang, putting it at 78 li. Stenz gives 96 li, which agrees with the War Office Shantung map.

li	miles (approx.)	
		and rejoin the canal again at Ma-chia-k'ou, but the passage from Wei-shan Hu to Chao-yang Hu is difficult except in high water, as the channel is overgrown with reeds.
521	156½	**Chan-ho-cha.** **Sha-kou-ying.**
546	164	**Pêng-kou.** The localities along the Wei-shan Lake are very doubtful. The authorities followed here are Stenz and Chinese maps. Gandar mentions *Ch'ih-shan.*
(?)		*Lin-shan* ?
566[1]	170	**Siachen,** P., market village of some importance at the extremity of the Wei-shan Lake.
572	171½	*Yang-chuang.*
(?)		*Hsieh-ho-pa.*
(?)		*Ta-wang-miao.*
596[2]	179	**Chu-mei-cha** (Sung-chia-cha). Here the canal enters into the Chao-yang Lake.
604	181	*Hsin-chuang-ch'iao.* The boundary line of Kiangsu runs due W. ; the canal ceases to skirt it but continues NNW.
608	182½	**Hsü-chia-ying** (Shih-hui-chiao on English map).
612	183½	**Fan-chia-k'ou** (or Wan ?).
620	186	**Ma-chia-k'ou.** A bridge crosses Chao-yang Lake dividing it from Tu-shan Lake. The latter is very shallow and often quite dry. Parts of it are being reclaimed. Boats which left the canal at Hanchwang to sail through the Wei-shan and Chao-yang lakes rejoin it here.
(?)		*Mêng-chia-k'ou.*
(?)		*Shih-chia-k'ou.*
(?)		**Ch'iao-t'ou-chi.**

[1] According to Gandar the distance between Hanchwang and Siachen is only 50 li [instead of 70].

[2] Siachen to Chu-mei-cha is 44 li according to Gandar ; we have followed Stenz.

li	miles (approx.)	
640	192	*Hsing-chuang-cha.*
652	195½	*Li-chien-cha.*
670[1]	201	**Nanyangchen,** P., village with market (especially for fish, fowls, straw-braid).
682	204½	**Tsao-lin-cha.**
690	207	**Lu-ch'iao.**
694	208	*Shih-chia-chuang-cha.*
699[2]	209½	**Chung-chia-ch'ien-cha.**
705	211½	**Hsin-cha.**
713	214	*Hsin-tien-cha.*
731[3]	219½	**Shih-fo-cha.**
739	222	*Chao-ts'un-cha* (Chao-chuang-cha).
(?)		*Tsai-ch'êng-cha.*
746	224	**TSINING,** P. T. RS., important trading centre, connected by a branch railway (20 miles) with Yenchowfu, on the Tientsin–Pukow main line. Many bridges cross the canal. Goods brought overland from Tsingkiangpu often reshipped here. Important locks (Fên-shui-cha). From Tsining the canal, after making a loop SW., continues NNE. as far as **An-shan** (about 140 li or 42 miles from Tsining). From there to the Yellow River the old canal is usually dry, but a fine channel will be found through the P'o Ho, which enables the largest boats of the Yellow River to reach An-shan, and places the latter (an important market village for cereals) within easy reach of Tsinan, the Tientsin–Pukow Railway, and the Shantung Railway (distance from An-shan to Tsinan 66 miles as the crow flies,

[1] According to War Office map Nanyangchen is not so far N. Measured on the map the distances are: Ma-chia-k'ou–Nanyangchen 13 miles (against 50 li); Nanyangchen–Lu-ch'iao-cha 9 miles (against 20 li).

[2] Shih-chia-chuang-cha to Chung-chia-ch'ien is 10 li according to Gandar.

[3] Hsin-tien-cha to Shih-fo-cha 10 li (instead of 18), according to Gandar.

li	miles (approx.)	
		actual journey considerably longer owing to winding course of Yellow River). For details of the route beyond Tsining see Report on Shantung.

ROUTE 20

TUNGCHOW TO THE YANGTSE AND THE SEA-COAST

Authorities: G. E. Pereira, Feb. 1908 (Route A); H. Davies, April, 1909 (Route C); Admiralty Chart 2809, Dec. 1914; Yangtse Kiang Pilot, 1914.

(A) Lao-lu-ching-chiang to Tungchow ($5\frac{3}{4}$ miles)

General direction N.

(*a*) *Water route.*—Yangtse steamers no longer drop passengers for Tungchow off Lao-lu-ching-chiang, but call at the mouth of the **T'ien-shêng-chiang** ($2\frac{1}{4}$ miles further up the north bank of the Yangtse), where a landing-stage with two hulks has been provided. The red brick custom-house with its clock-tower is conspicuous from the Yangtse. A navigable creek leads to Tungchow, about 5 miles inland (distance by creek about 8 miles).

(*b*) *Land route.*—The road is fairly good, 8 ft. to 15 ft. wide; liable to become heavy after rain. It is much used by wheelbarrows. Wooden trestle bridges are thrown across the many creeks encountered, and are wide enough for wheelbarrow traffic. The country is flat, much cultivated, and intersected by creeks and long trenches full of water, which do not as a rule connect with one another. The *Lang Shan*, with a conspicuous pagoda, stands out to the SE. Owing to the number of trees and houses the view is everywhere much restricted. Houses are much dispersed, and not grouped into villages. The chief means of transport are wheelbarrows.

Between Lao-lu-ching-chiang and T'ien-shêng-chiang, about 1½ miles farther up the river, also on the north bank, is Hsin-lu-ching-chiang, a hamlet of about 10 huts, where there is a narrow creek running inland for a mile or so.

miles	
0	**Lao-lu-ching-chiang.** About 20 houses. Direction N. along fairly good 8-ft. road, used by wheelbarrows. Country flat and dotted with houses, surrounded by trees, or under cultivation. Small creek, 6 ft. wide, 3 ft. deep on r., crossed by several wooden trestle bridges.
1½	Direction E., crossing creek by a wooden trestle bridge. Trenches filled with water, 20 ft. wide, on either side of road for ¾ mile.
2½	**Lang-chia-chü** (40 scattered houses). In many places, a trench with water on one or other side of the road.
3	**T'u-ssŭ-tzŭ** (10 houses). Road turns NE.; 15 ft. wide for rest of the way.
4	*Tsao-wang-t'ing* (temple).
4¾	Under a gateway, through narrow and crowded west suburb.
5¼	Stone single-arch bridge, 18 yds. long.
5¾	**TUNGCHOW,** P. T. (see *Gazetteer*). Plank bridge over small channel of river to *West Gate*.

(B) Haimenting to Tungchow (18 miles crow-fly)

General direction NW.

Haimenting, P. T., in a fertile and densely populated alluvial plain, opposite the island of Tsungming (Ch'ung-ming). The coast-line undergoes constant changes, owing to the shifting of sand-banks. If the projected railway from Tsing-kiangpu to Haimenting is ever constructed the town will increase greatly in importance. It is connected with Tungchow by a road and various creeks (no details available).

(C) Tungchow to Lüsze (53 miles)

General direction E. This is the main water route; but it winds considerably, and the land route is probably 10 miles shorter. The waterway is not tidal. Its width is from 15 to 50 yds., averaging about 25 yds. Its depth, in April, varies from about 3½ to 6 ft. The shallowest parts are those near Tungchow and in Kinsha. There is no current. The banks average about 3 ft. in height. This waterway is regularly navigated by a steam-launch drawing 2½ ft. towing a passenger-boat holding 60 passengers. The launch goes to Lüsze every other day, returning to Tungchow on the intermediate days. In May and June, when much water is taken out of the canal for irrigation, there is only 2 ft. of water in some places near Tungchow, and the launch service may have to stop for a month. The canal is also much used by boats, propelled by sail or *yulo*, or towed from the bank. There is a towpath the whole way from the east suburb of Tungchow to Lüsze.

Two hundred boats are obtainable in Tungchow or Kinsha, and from 40 to 80 in Siting, Kinyüchen, Yüsi, Wu-fu-ch'iao, Szekia, Lukia, and Paochang. There are very few boats in Lüsze. The above include a considerable proportion of house-boats, accommodating from 6 to 12 men. Cargo-boats have an average capacity of from 70 piculs to 200 piculs (about 4 to 12 tons). Navigation is never stopped by ice.

Bridges are numerous, averaging one to the mile. In reaches of the canal where bridges are few, ferries are numerous. The ferries are small boats, capable of taking about 6 men. The bridges are chiefly high and of wood; none of them is low enough to obstruct navigation.

The surrounding country is quite flat, very highly cultivated, and with numerous villages. It is much intersected by canals, which practically restrict movement to the paths. Trees are scarce. The towpath is regularly used by wheel-barrows. The houses would afford good temporary accommodation.

Very large supplies of rice, flour, vegetables, fish, chickens, ducks, and eggs are to be got in Tungchow and Kinsha. Smaller supplies of the same sort are obtainable in the various market villages passed through. There is not much in Lüsze, which is a poor place. The water of the canal is drinkable if boiled.

miles	
0	**TUNGCHOW,** P. T. From wharf near *South Gate* road leads round city.
1½	*East Suburb.* From here a towpath, first on l. bank.
4	*Pa-li-miao,* small temple on l. bank.
5¾	**Kuan-yin-t'ang** (20 houses), on both banks.
8½	**An-shan** (Yunganchen, P. ?), market village (80 houses).
	A canal goes off to the north, said to lead to Shih-kiang.
	Direction of route changes here from NE. to E.
10½	**Hu-chia-ch'iao** (12 houses).
13½	**Siting,** P., market village (200 houses).
18	**Kinsha** (Chin-sha), P., market town (800 houses).
22¼	**Kinyüchen,** P., market village (120 houses).
24¾	**Yüsi,** P., market village (80 houses).
26½	**Wu-fu-ch'iao,** market village (60 houses).
28	**T'ou-ch'iao,** village (80 houses). The towpath crosses to the r. bank by a bridge.
31¼	**Ssŭ-yang-pa** (12 houses) on r.
	A canal turns off here to r., with a haulover about 300 yards distant. This canal is said to lead to Ch'ing-lung-chên, 10 miles away.
32	**Szekia** (Ssŭ-chia-pa), P., market village (100 houses).
33	**Liang-chia-tien** (30 houses).
33½	**Wu-chi-ch'iao** (40 houses).
35¼	**Wang-tsao-ho,** market village (60 houses).
37	**Yütung Ku** (or Lü-tsao), P., market village (120 houses).
42½	**Paochang,** P., market village (120 houses).

miles

47½ **Lukia,** P., market village (80 houses).

53 **Lüsze,** P., market village (200 houses). The canal ends here.

The village is some 9 or 10 miles inland. Although connected with the sea by a creek, no sea-going junks can reach it owing to numerous sand-banks.

ROUTE 21

TUNGCHOW TO FOWNING

Authorities: G. E. Pereira, Feb. 1908; Gandar, Le Canal Impérial, 1894; War Office MS. maps of N. Kiangsu.

(A) Land Route (222½ miles)

A road leads along the *Fan-kung-ti,* or great embankment (constructed as a protection against the sea). It extends from near the mouth of the Yangtse to the east of Tungchow, northwards through Tungtaihsien and Yencheng Ku, running almost parallel to the Grand Canal (at a distance of some 50 to 60 miles), and constitutes an important means of communication between the Yangtse and North Kiangsu. It is much used by wheelbarrows, but is not passable for carts. Originally the embankment was 30 ft. wide at base, 10 ft. at top, and about 15 ft. high. Through neglect and decay these dimensions have been much reduced, the height being often not more than 5 or even 3 ft. Numerous graves dug in the sides have at places reduced the roadway to a minimum. Such is the case for example between Tungtaihsien and Paikü. Artificial mounds 30 ft. high are distributed along the embankment and command a good view of the neighbouring country. Eighteen flood-gates built in the embankment afford an outlet to the waters of the great Kiangsu plain. The width of some of them exceeds 20 ft.

Various references to the state of the Fan-kung-ti will be found in Route 21 B.

The Fan-kung-ti passes some 20 miles E. of Tungchow and can most conveniently be reached via Kinsha. The latter town is on the navigable creek described in Route 20 C.

miles (approx.)	
0	**TUNGCHOW,** P. T. (see *Gazetteer*). For details up to mile 18 see Route 20 C.
18	**Kinsha,** P. Route leaves bank of creek. The latter bends SE. and leads to Lüsze (see Route 20 C). Direction NE.
20¾	Route ascends the *Fan-kung-ti,* and continues along it all the way to Fowning.
27	**Ch'i-an** on l.
29	**Wu-tsung-p'u,** on l. A road goes W. to Shihkiang, P. (5 miles).
30	**Liu-tsung-p'u,** on l.
31	Roads go off to l. and r.
41	**Chüehkiang,** P., 1½ miles on W. The town is separated from the Fan-kung-ti by a creek. This creek comes from Jukao (about 40 miles W.), and turns N. skirting the Fan-kung-ti for 5½ miles. A road along creek from Jukao crosses the Fan-kung-ti and goes E.
53	**Ch'ang-sha,** on r.
57	**Chin-chia-p'u,** on l.
72½	A creek runs SSW. to Chaho, P., on the Jukao–Chüehkiang creek. Sea about 1½ miles on r. Farther N., Fan-kung-ti recedes again from sea-shore.
93½	A road goes S. to Jukao (14 miles). **Shih-wu-tsao,** on r. The *Hsia-êrh Ho,* a creek, crosses the Fan-kung-ti to N. and follows along it to Fuan Ku, where it recrosses.
111½	**Fuan Ku,** P. on l. Farther N. the Fan-kung-ti runs parallel with the Ch'uan-ch'ang Ho, described in Route B, mile 68 onward.
222½	**FOWNING,** P. (see *Gazetteer*).

(B) Water Route (about 179 miles)

The route can be conveniently divided into the following sections :

(1) *Tungchow to Haian* (58 miles)

The route lies along the *Li Ho*.

miles	
0	**TUNGCHOW,** P. T. For detailed account see below, Route 22.
58	**Haian,** P.

(2) *Haian to Tungtaihsien* (about 26 miles)

Along the Ch'uan-ch'ang Ho, a fine canal dug mainly along the western side of the great embankment or Fan-kung-ti (described above, Route 21 A). Much used by salt-boats. In this section the canal is partially silted up. There is enough water for launches in summer, but in winter the longer alternative routes must be followed (see below, Route 21 C). A dam blocks up entrance of creek.

miles (approx.)	
58	**Haian,** P. T. The Ch'uan-ch'ang Ho begins. It is separated from the Li Ho by a dam. Direction NNW. The Li Ho, followed up to this point, turns SSW. (see Route 22).
68	**Fuan Ku,** P. From this point onward the Fan-kung-ti runs very close to E. bank of canal.
76	**Anfeng,** P.
78	**Liangtow,** P.
84	**Tungtaihsien,** P. T., large unwalled city (see *Gazetteer*).

(3) *Tungtaihsien to Paikü* (19¼ miles)

Direction N.

The Yen Ho (No. 2) joins the Ch'uan-ch'ang Ho through a 25-ft. gap in an earth barrier. The current sets N., and

the water is clear. It is 50 yds. wide for the first 7 miles and 70 yds. for the remainder of the section. Its depth varies from 9 ft. 2 in. to 9 ft. 8 in., the deeper part being mostly on the l. For 300 or 400 yds. north of Ts'ao-yen its depth is 5 ft. It is only bridged in two places, one at the barrier at Tungtaihsien, and the other at Paikü. In consequence there are numerous ferries. The country is highly cultivated; chiefly fields of rice and spring wheat. Villages are numerous, especially in the latter part of the section.

There is a towpath on the r. all the way, and embankments on either side from 8 to 10 ft. above level of river. On r. the country is 6, and on l. 4 ft., above level of river. For the first 8 miles there is an additional embankment close to r., 8 to 12 ft. high, broken every 80 to 100 yds. by channels through which the river, when it rises a further 6 ft., can drain off between it and the Fan-kung-ti. There are a number of side-creeks, some bridged and others not.

The Fan-kung-ti (see Route 21 A) is only raised 3 to 5 ft. above the level of the country on the r. For the first few miles the road is in good condition, but afterwards much spoilt by the thousands of graves made on it, and it degenerates into a footpath, used by foot-passengers and wheelbarrows. A dozen or more river war-junks are kept on the Ch'uan-ch'ang Ho, which, from Taichow to Yencheng Ku is also called the Yün-yen Ho.

Rivers flowing east to the sea from the Ch'uan-ch'ang Ho are usually called *Hai Ho* or 'Sea River'. In this notice they are distinguished by giving each the name of the place from which it branches off.

miles

84 **Tungtaihsien.** P. T. Leaving at the NW. corner, the route leads down the *Ch'uan-ch'ang Ho*, which is partly dammed at the junction with the Yen Ho (No. 2) by an earth embankment 90 yds. long, 14 ft. broad, and 10 ft. high, with only one entrance 25 ft. wide, crossed by a removable bridge 27 ft. long. After

miles

passing embankment at junction the river makes a bend eastwards for about 300 yds. and then continues north.

85 River 6 ft. 3 in. deep near r.

86 River 9 ft. 3 in. deep.

86½ **Hsia-chia-shê** (20 houses), on r.

87 **Pei-hsia-chia-shê** (30 houses), on r.

87¾ River 9 ft. 3 in. deep. 200 yds. farther on, **Liu-chia-shê** (called locally Niu-chia-sa), 20 houses on l. A ferry.

88¾ **Chang-chia-shê** (30 houses), 100 yds. from r.

89½ **P'an-chia-shê** (30 houses), on l.

90½ Dammed entrance to the *Tung-hai Ho*, consisting of a lock of the usual Chinese pattern, with 5 gates, one open, the remainder closed with earth. Lock protected from river by an outer barrier of earth with a single entrance. The Tung-hai Ho is 50 yds. wide and flows east to Shên-chia-tsao on the coast, said to be 50 li (17 miles) distant. After passing this lock the main branch of the *Ch'uan-ch'ang Ho* makes a semicircular bend to the west for about 600 yds. A smaller channel, 10 yds. wide, 4 ft. 3 in. deep, continues straight on through Ting-hsi.

91 **Ting-hsi** (200 houses), with single-arch stone bridge over smaller channel.

91¼ Main channel rejoins smaller one. River 70 yards wide. Embankment on r., 8 to 10 ft., and country 4 to 6 ft., above river-level. Fan-kung-ti 400 yds. from r. bank.

92 Fan-kung-ti 50 yds. from r. bank, taking place of embankment. R. bank 6 to 8 ft. above river-level, and terraced with rice plots.

92¾ Two southern locks of *Hai Ho* on r., with separate entrances, first with two dammed gateways, second with three gates, one of which is open, the other two closed with earth. (The Hai Ho joins the sea at

miles

Sitwan, 50 li distant. It flows at first north, nearly parallel to the Ch'uan-ch'ang Ho.)

93 Main channel of Ch'uan-ch'ang Ho makes a bend to the west for 600 yds. Small channel 10 yds. wide goes straight on through town of **Ts'ao-yen** (400 houses), where it is crossed by a single-arch stone bridge and another of wood.

93½ Main channel again rejoins smaller one. River 5 ft. deep for 300 or 400 yds.

94 Two northern locks of Hai Ho on r.; the first with two gates, the second with three gates; only one of the latter open. Hai Ho 400 to 600 yds. distant on r. Country on r. 6 ft. above water-level; Fan-kung-ti, about 6 ft. higher, and 70 yds. to r.

94¾ Villages numerous in country to west.

95¾ **Chu-chia-yüan** (50 houses) on l. River 8 ft. deep.

96¼ River 7 ft. 6 in. deep in centre.

96¾ Hai Ho, 600 yds. from r. Ch'uan-ch'ang Ho, 7 ft. 9 in. deep in centre, 8 ft. 5 in. near l. R. bank 8 ft. above water-level, with Fan-kung-ti usually 3 ft. higher and 30 to 50 yds. from r. bank.

98 **Chieh-p'ai-t'ou** (30 houses), on l. Ferry.

98¾ **Shih-li-tun** (Sa-li-dun), 30 houses, on both banks. Ferry.

Hai Ho, 2 miles from r. bank, now turns east.

101 River 10 ft. deep in centre.

101¼ R. bank 4 ft. above water-level; Fan-kung-ti 6 ft. higher and close to r. bank for a short distance. Country near r. bank swampy or covered with graves.

102¾ Lock on r. with two gates closed by dams. Pond on farther side of it, crossed by a wooden bridge. This lock communicates with the *Paikü Ho* to north of town.

103¼ **Paikü** (Bok-jü) P., town on r. (400 to 500 houses). Here river is crossed by a high, weakly constructed wooden bridge on six trestles, 54 yds. long, 10 ft. wide.

miles

It is very unsafe and roadway planks are uneven, with many gaps. Opposite the town, the Ch'uan-ch'ang Ho again bends to the west for about 200 yds., whilst smaller channel, crossed by a single-arch stone bridge of span and height each 15 ft., goes through the town.

The *Nan-hsing-hua Ho* from Pehnganfeng, 40 li distant, comes in from west.

(4) *Paikü to Pien-ts'ang* (18 miles)

Direction N. along the Ch'uan-ch'ang Ho. The river averages 60 to 70 yds. in width, though for the last 1½ miles it is no more than 50 to 60 yds. For the first 9 miles it is 12 ft. deep, and then from 7 ft. to 8 ft. 6 in. It follows a winding course. The r. bank is 6 to 10 ft. above level of water, and the Fan-kung-ti is usually close to it, and 3 to 5 ft. higher. On the left the embankment is 10 to 15 ft. high and 12 ft. wide, with a track along it. There is a towpath on one side or the other, and the side-creeks usually have trestle bridges with single planks. Rivers branching off to the sea are usually partially dammed by locks at their junction with the Ch'uan-ch'ang Ho.

The country is highly cultivated. Rice is the chief crop, after which come wheat and beans. Houses are scattered about everywhere, and there are numerous small villages at some little distance. Most of the traffic is on the river, on which are many small boats, a fair number of house-boats, and some steam-launches. Wheelbarrows are not so much used, and there are no donkeys, mules, ponies, or carts on the tracks near the river. Water-buffaloes are plentiful.

miles

103¼ **Paikü,** P. North of the town the *Paikü Hai Ho* flows east to Tou-lung-chiang, 80 li distant on the sea. It is about 30 yds. wide, and has three locks each connected with the Ch'uan-ch'ang Ho by a

miles

separate channel. The first lock has two gates, one dammed; the second five, of which three are dammed; and the third two, with one dammed. Each gate is about 7 yds. wide. The Ch'uan-ch'ang Ho is 17 ft. 8 in. deep at the bend, and 12 ft. deep north of the town. The Fan-kung-ti is 200 yds. from r. bank, and raised 3 to 5 ft. above country.

104¼ River 80 to 100 yds. wide.

105 River 12 ft. 2 in. deep.

105¼ Towpath on l. with embankment 10 to 15 ft. high and 12 ft. wide on the top, which is mostly cultivated, with a track for traffic. Creeks on l. crossed by trestle bridges, usually with a roadway of planks, or logs laid across. Creeks on r. few in number and unbridged till they reach the Fan-kung-ti. River 12 ft. 3 in. deep.

106 Fan-kung-ti, 100 yds. from r. bank.

107 River 60 to 70 yds. wide.

107½ River 10 ft. 4 in. deep.

108 River 8 ft. 7 in. deep.

109 **Liu-chuang-ch'ang** (200 houses), on r., with a high 6-trestle bridge S. of town.

Here is the lock at the entrance of the *Ch'i-tsao Ho*, to which there are two gates, one dammed. This river goes to Ch'i-tsao, 18 li, and the sea, 30 li, distant.

Ch'uan-ch'ang Ho, 12 ft. 6 in. deep, makes a bend west for 400 yds. away from the town. It is then 11 ft. 7 in. deep, and here joined by another *Ch'uan-ch'ang Ho* (different characters in name), coming from Ta-ying, 50 li to the west.

110¼ River crossed on north side of town by another trestle bridge after completing bend to west, to which it subsequently turns again past the *Tzŭ-yün-shan* temple on r. After this it again flows N.

The *Pa-tsao Ho* (with a lock, of which the two gates

miles

are open and dilapidated) goes to Pa-tsao, 15 li, and the sea, 39 li distant.

Ch'uan-Ch'ang Ho, 14 ft. 7 in. deep near bank, 7 ft. 8 in. near l. Towpath again on r.

111 Fan-kung-ti, 20 yards r., 12 ft. above river-level, and 6 ft. above country on r. There are now fewer graves along it, and it could easily be levelled for carts. Embankment 12 ft. high on l.

111½ River 7 ft. 3 in. deep.

114¼ River 7 ft. 5 in. deep.

115 Fan-kung-ti, 200 yards from r. bank.

115½ River 8 ft. 5 in. deep.

116¼ A canal 20 ft. wide, unbridged at its entrance to river, passes under a bridge through the Fan-kung-ti and goes eastwards past **Hsiao-t'uan** (100 houses), a mile to east.

117½ Fan-kung-ti again approaches river.

118 **Ta-t'uan** (60 houses) on r. The *Pei-hsing-hua Ho* comes in from west. The *Shên-chia-shê Ho*, with a lock (two open gates) and channel open to north of it, goes east to T'ung-yang-chiang, 30 li distant, and to the sea.

118¾ River 7 ft. deep.

119¾ Roadway of Fan-kung-ti again obstructed by tombs for ½ mile. River 50 to 60 yds. wide.

120½ Fan-kung-ti, 300 yds. from r. bank.

121¼ **Pien-ts'ang,** 300 houses on r., of which 100 are near bank, remainder scattered.

A river without locks, called the *Pien-ts'ang Hai Ho*, flows from the south of the town east to the sea, 120 li distant.

A wooden bridge over Ch'uan-ch'ang Ho opposite the town, on two trestles with brick roadway, 42 yds. long, 12 ft. wide, centre span from 20 to 24 ft. high and 33 ft. long. The river at the bridge is 31 yds. wide, elsewhere from 40 to 50 yds.

(5) *Pien-ts'ang to Yencheng Ku* (15¼ miles)

Direction NNW. along the Ch'uan-ch'ang Ho. Average width of river 50 yds., though in places it narrows to from 30 to 40 yds. The average depth is 9 ft., though in latter part of the route it is no more than from 7 to 7½ ft. On the r. the bank is 8 to 10 ft. above the level of the river, with the Fan-kung-ti 100 to 200 yds. distant from it. In some places it is on a level with the country, in others it is raised 3 to 6 ft. A road in fair condition, with, however, some bad places in it, runs either along it or just below on the east side. The l. bank—in places an embankment—is mostly 10 ft. above the level of the river. The country is either on a level with the top of the river banks or 3 or 4 ft. lower. It continues a fertile, highly cultivated plain, covered with houses and small villages. Water-buffaloes, pigs, and fowls are plentiful, but there are no horses, donkeys, mules, or bullocks. The river is crossed at Pien-ts'ang, Ch'ên-chia-hsiang, and Wuyu by wooden trestle bridges. Side-creeks are fairly numerous, and many of them are unbridged on the r., and have to be crossed at the Fan-kung-ti. There are many war-junks on the river. It is stated at Yencheng Ku that the Ch'uan-ch'ang Ho does not freeze to the south, but that it does so occasionally, for about 10 days in January, on the reach northwards to Fowning in exceptionally severe winters.

miles	
121¼	**Pien-ts'ang.** Route continues down Ch'uan-ch'ang Ho (or, as it is here called, Yün-yen Ho); r. bank mostly 8 to 10 ft. above water, sometimes only 6 ft. The Fan-kung-ti is 300 or 400 yds. to r., and on level with fields. L. bank 8 to 10 ft. above river. Side-creeks fairly numerous; those on r. crossed near entrance by trestle bridges with plank roadway. Fertile plain, many houses scattered about, especially on l., small villages more numerous.
122½	**Ch'ên-chia-hsiang** (called locally Ch'ên-chia-han), 60 houses on r. Here river is crossed by a wooden

miles

bridge on four trestles, with plank roadway, 50 yds. long, 12 ft. wide, centre span 30 ft. long, 24 ft. high. River 40 yds. wide at bridge, 8 ft. 10 in. deep.

123¼ Canal, 10 ft. wide, crossed by trestle bridge with roadway of four planks, goes east. Creeks on l. unbridged. River 8 ft. 6 in. deep.

123¾ Fan-kung-ti, 100 yds. to r., and 3 ft. above level of fields. A fairly good 4-ft. road below it on east side, but in some places furrowed by wheelbarrows.

124½ River 9 ft. deep.

124¾ **Po-chia-hsiang** (Bok-chia-han), 50 houses, on r. Ferry-river 8 ft. 6 in. deep.

The *Tung-chiang Ho*, coming from Wuyu, approaches to within 100 yds. and then turns east to Pei-wan-tzŭ (Bok-an-tzŭ), 80 li, and Liu-wang-t'ang on the sea, 100 li distant.

Fan-kung-ti, along r. bank for a mile ; a good 12-ft. road, paved with bricks.

125¾ **Wuyu,** P. (3,000 houses), on r. River 9 ft. 4 in. deep.

The *Tung-chiang Ho* (crossed by a small wooden bridge), 15 yds. wide, flows out of the Ch'uan-ch'ang Ho, at first to the south, and nearly parallel to the latter for a mile.

Ch'uan-ch'ang Ho makes a bend of 600 yds. to the west of the town.

126½ Wooden bridge on four trestles, 54 yds. long, 12 ft. wide. Centre span 33 ft. long by 20 ft. high. River 30 to 40 yds. across at the bend. It turns east after passing the town. A channel (only for small boats) goes straight through the town, and to the north of the latter a canal branches off east.

Towpath on l. at bend, then again on r.

127¼ River, 12 ft. deep, 50 yds. wide. Fan-kung-ti, with fairly good unpaved 8-ft. road, near r. bank.

129¼ River 12 ft. deep. South **Ts'ai-chia-hsiang** (30 houses) on l.

miles

Hsiao-hsin Ho, 20 ft. wide, flows east to Yang-an, 30 li, and to the sea, over 100 li distant.

129½ North **Ts'ai-chia-hsiang** (70 houses), on r. Fan-kung-ti 100 yards to r., 3 ft. above level of river, 6 ft. above level of fields to east.

130¼ 20-ft. mound, said to be 20 li from Yencheng Ku, on r. River 11 ft. deep.

130½ **Hsü-chia-hsiang** (Chu-chia-han), 30 houses on r.

131¼ **Ti-pan-ying** (20 houses), on l.

132 River 10 ft. 4 in. deep.

132¼ Bank on r. 6 ft. above river, 10-ft. embankment on l., 4 ft. above level of country to west. Fan-kung-ti 200 yds. to r. and 3 ft. higher. **Ma-chia-chuang** (20 houses) on r.

133 *Hsin Ho* flows east to Tung-yang-an, 25 li, and Ta-hai-k'ou on the sea, 120 li distant. It is 20 yds. wide, and crossed about 200 yds. farther down by a trestle bridge.

Tai-chia-chuang (20 houses), on l. River, 7 ft. 1 in. deep near r., continues straight for 3 miles, 45 yds. wide. Houses along each bank.

Fan-kung-ti 600 yds. from r.

133¼ River 7 ft. 5 in. deep.

135¼ River 7 ft. 8 in. deep.

135¾ *Lung-wang-miao* (temple) on 50-ft. mound 600 yards to r. Fan-kung-ti passes to west of it.

136 River bends to NW.

136¼ Entrance to the *Hai Ho* on the r. This river is dammed 200 yds. farther on. Beyond, there is a dry channel for 300 yds. to a lock with two gates, rather dilapidated. The channel bends north, and is choked with reeds till opposite the east gate (about 800 yds.), where a small channel from the latter joins it, and small boats can go from here to its junction with the *Yang Ho*.

miles

136½ **YENCHENG KU,** P. South gate, 50 yds. from river, which turns to west of city.

For description of Yencheng Ku see *Gazetteer*.

(6) *Yencheng Ku to Fowning* (42½ miles)

General direction NW. Starting from the South Gate of Yencheng Ku, this route follows the Ch'uan-ch'ang Ho round the SW. corner of the city, and northwards to Li-yang-k'ou, ¾ mile beyond the North Gate. From this place northwards it is known as the Shangkang Ho. It is fed by the numerous canals from the Hsia-ho district, and is a continuation of a branch of the Ta-shih-wan Ho from Hwaianfu.

North of Shangkang the name of the river becomes Kang Ho, by which it is known up to the end of the route. Under normal conditions the current sets to the north, but in time of flood is sometimes driven south. The width of the river varies from 18 to 30 yds.; its depth from 4 to 9 ft. The banks are from 6 to 12 ft. above the level of the water, and in the early part of the route towing is much hampered by unbridged creeks. From Hsin-hsing-ch'ang northwards, however, most of them are bridged. There are numerous ferries.

The Fan-kung-ti embankment follows more or less the course of the river. It varies in width for the most part from 3 to 10 ft., and in height from 3 to 6 ft., though in places it is on a level with the fields. Its surface is, in general, good. At first houses are scattered about and rarely grouped into villages, which towards the end of the route become more frequent. The country is highly cultivated, the chief crops being spring rice and beans. Windmill irrigation wheels are much used. Water-buffaloes, pigs, and fowls are plentiful. There are few donkeys, and no mules or ponies. Carts are not used, but there is a considerable amount of wheelbarrow traffic. Small boats are numerous, and there are a few large salt-boats. In a severe winter the Kang Ho may freeze.

miles

136½ **YENCHENG KU,** P. South Gate. River is 60 to 70 yds. wide, over 15 ft. deep, and rather muddy. The towpath is on the l., along a 10 ft. embankment.

139 The Ch'uan-ch'ang Ho, 9 ft. 5 in. deep, turns east and divides into two channels, the main one flowing between the *Wang-hai-lou* temple in the south, and the *T'ien-hou-kung* temple in the north, and passing through the *Shih-ta-cha* lock with five gates, of which the three centre ones are open, and the outer dammed with earth. The gates are bridged with movable planks to admit of the passage of boats. Current very strong. The small channel passing to the north of the T'ien-hou-kung has a lock with two similar gates. Village of **Cha-k'ou** (200 houses) on bank to north of smaller and south of larger lock. The two channels unite further on.

The river to the east of the locks is called the *Yang-k'ou Ho*. It turns SE. for nearly a mile, to **Li-yang-k'ou** (30 houses), on the r., the port of Yencheng Ku, and distant ¾ mile from the *North Gate*. Sea-going junks come up to here from Manchuria, Shantung, and Shanghai. It eventually reaches the sea at Hai-k'ou (see Route 25 D).

After passing to the west of the locks the present route to Fowning ascends the *Shangkang Ho*, here 60 yds. wide and 10 ft. deep.

139¼ The *P'i-ch'a Ho*, 40 yds., wide, flows from the west into the Shangkang Ho. The latter river is 40 yds. wide above the junction, with 10 ft. embankment on r., and 4 ft. embankment on l. Towpath on l.

140 **Chên-chia-têng** (San-ga-den), 10 houses, on l. Shangkang Ho, 25 to 30 yds. wide, 9 ft. 4 in. deep; water rather muddy. Towpath on l., broken by 11 unbridged creeks, varying from 6 to 10 ft. in width, within the next 3½ miles. In addition there are shorter channels which have also to be passed. The

miles

creeks on the r. are mostly bridged, but trees along that bank interfere with towing.

140¼ River 8 ft. 3 in. deep.

140½ **Sun-chia-chuang** (20 houses), 200 yds. to l.

140¾ **Yüan-chia-chuang** (Yu-ga-chuang), 10 houses, on both banks. River 8 ft. 3 in. deep.

141½ **Hsi-yüan-chia-chuang** (10 houses), on r.

141¾ The Fan-kung-ti is here ½ mile to east, and raised 6 ft. River 8 ft. deep.

142¼ **Wu-chia-ho** (30 houses), on r. River 10 ft. deep. The Fan-kung-ti is on level with l. bank, 4 ft. higher than country to east. Distant 200 yds. from river, which shortly bends west from it.

142¾ River 8 ft. deep.

143½ Fan-kung-ti, now a good 8-ft. road, along l.; 10-ft. embankments on both banks, 4 to 6 ft. above level of country.

144 Main channel of river makes a bend to the west of 400 yds. to avoid flooding Hsin-hsing-ch'ang when the river is high; whilst a small channel, only used by boats of shallow draught, goes straight on with the Fang-kung-ti through **Hsin-hsing-ch'ang** (200 houses). Main channel 7 ft. 4 in. deep at bend.

144¾ Main channel running north passes under wooden bridge on two trestles, 27 yds. long, with centre span of 27 ft., and 20 ft. high. Another 200 yds. farther on it bends east for 400 yds.

145½ Main channel rejoins smaller channel north of Hsin-hsing-ch'ang, and again flows north. Banks 12 ft. high on either side of river, here 8 ft. 3 in. deep.

147¼ **Yi-chia-tsao** (Ni-ga-so), 20 houses, on r.

147½ Fan-kung-ti, ½ mile to east, on level with fields, and fair 3- to 5-ft. path.

148¼ **Sha-chia-ying** (40 houses), 100 yds. r. River 7 ft. deep.

miles

148½ Unbridged creek, 30 ft. wide, on l.

148¾ River 6 ft. deep.

149¼ The *Ta-t'uan Ho* (or Yen Ho), 12 ft. wide and shallow, crosses at right angles. **Ta-t'uan-k'ou** (Ta-t'ou-k'ou), 10 houses, on r. Shangkang Ho 5 ft. 2 in. deep.

149¾ River 5 ft. 4 in. deep. Fan-kung-ti, 600 yds. to east, level with fields.

150½ River 6 ft. deep.

150¾ **Shên-t'ang-tsao** (Shên-t'ang-joe), **Wang-chia-tsao, Chang-chia-tsao,** and **Chou-chia-tsao,** four villages, practically a succession of straggling houses (500 or 600), on both banks, for about 1½ miles.

151¼ River 6 ft. 4 in. deep.

152¼ River 6 ft. deep. Unbridged creek on l.

153 *Ta-shih-wan Ho* (Tay-ssŭ-wan Ho), 30 yds. wide, flows in from west. It comes from Hwaianfu, said to be 200 li distant (see Route 25 B). It here divides, part of its waters flowing south to form the Shangkang Ho, and part continuing NE. through Shangkang.

153¾ **Shangkang,** P., said to have 4,200 houses, chiefly on east bank. A brigadier (*T'ung-ling*), commanding war-junks, is stationed here. There are no missionaries. River here crossed by two wooden bridges, the first, on two trestles, 31 yds. long; centre span 33 ft. by 20 ft. high.

154¼ Second wooden bridge, on six trestles, 38 yds. long; centre span 33 ft. by 20 ft. high. Below the bridge the river bifurcates, one branch going NE., and, passing through a dilapidated lock-gateway, forms the *Shangkang Hai Ho,* 40 yds. wide, which flows to the sea. A channel, which joins it from the SE., called the *Hsiao-yen Ho,* is 20 yds. wide, and without current, being dammed ½ mile farther up. The second channel is that running NW. and NNW. to Fowning, known as the *Kang Ho.* It is here

miles

25 yds. wide, 4 ft. 5 in. deep, with 10 ft. banks. Towpath on l.

The Fan-kung-ti, which crosses from east to west at the second bridge in Shangkang, is now along l. bank. It is a fairly good 8-ft. road, though rather uneven. There is a succession of villages, composed of detached houses, at a couple of miles distance from both banks, for the first 9¼ miles to San-kuan-tien, with rice fields intervening.

155 River 4 ft. 2 in. deep.

155¾ **Hsia-chia-ch'iao** (120 houses). River 4 ft. deep.

156½ **Wu-li-tun** (100 houses), with 30-ft. mound, south of village, on l. River 4 ft. to 4 ft. 4 in. deep.

157½ **Ch'i-li-hsiang** (Ch'i-li-han), 100 houses. River 4 ft. deep.

158 **Tung-chia-ch'iao** (70 houses).

158¼ River 5 ft. 2 in. deep.

158¾ **Li-chia-hsiang** (Li-ga-han), 120 houses.

159½ **Wu-chia-ch'iao** (100 houses). River 18 to 20 yds. wide, 7 ft. deep.

160 **Yang-chia-hsiang** (Yang-ga-han), 300 houses.

160¾ **Pei-p'êng-chuang** (Bok-p'ang-chuang), 150 houses. River 7 ft. 5 in. deep.

161 Canal, 30 ft. wide, comes in from west.

161½ 30-ft. mound on l. River 7 ft. 5 in. deep.

161¾ **Ts'ao-yen-k'ou** (300 houses), with shops, on l. Here a wooden bridge, 34 yds. long, crosses the *Ts'ao-yen Ho*, which is 25 yds. wide. It flows into the *Kang Ho* from the west, and leaves it 100 yds. lower down, in an easterly direction.

162¾ River 8 ft. 3 in. deep.

163½ *San-kuan-tien* (temple) on l. River 8 ft. deep. The *Cha Ho*, which flows east to the sea from here, has only a few stones of a former lock remaining at its entrance. Houses along banks more scattered. Three canals come in from west.

miles

164¼ **Lung-wang-tun** (70 houses), on l., with a temple. River 9½ ft. deep.

166¼ Three canals come in from west. River 7 ft. 5 in. deep.

167 **Kowtengchen,** P. (Kou-wan-tun), town of 700 or 800 houses, with shops, on l.

The *Yü-ch'êng Ho* (called, locally, Yü-sang Ho), from Mêng-lung, 30 li to west, crosses the Kang Ho, south of the main part of the town. It is spanned by a wooden bridge, 41 yds. long, on six trestles ; centre span 30 ft. by 20 ft. high. Below the junction, river is 9 ft. 5 in. deep. Known from this point as the *Kou-wan-tun Hai Ho*, it then flows east to the sea (270 li distant by river ; 100 li by land), passing, at its exit, through a lock, with two gates, both open, and in rather a dilapidated state.

The Kang Ho, which had made a bend to the west of about 100 yds. before joining the Yü-ch'êng Ho, again flows NNW. It is here 30 yds. wide and 6 ft. 5 in. deep. The Fan-kung-ti, for the next ¾ mile, dwindles to a path, with graves between it and the river.

168¾ **Tsêng-chia-chuang** (100 houses), a straggling village on both banks. *Kang Ho*, 5 ft. 5 in. deep.

170 **Nan-k'an** (80 houses) on both banks.

170¾ **Chung-ch'ên-chuang** (100 houses), 300 yds. from r. Many villages 2 miles to west. Kang Ho 5 ft. 5 in. deep.

171½ Canal comes in from l.

172½ **Lu-chia-chuang,** 27 houses on l. Towpath sometimes on l., but crossed in many places by creeks unbridged at their junction with the river. The Fan-kung-ti, now a good 8- to 12-ft. road, raised 3 ft. above the fields, is 400 yds. to the west of the river, and crosses the creeks by planks or trestle bridges. Villages and houses numerous, more particularly along river banks. Kang Ho 25 to 30 yds. wide.

miles	
173¼	River 5 ft. 5 in. deep. Canal comes in from west. **T'ien-chia-shê** (30 houses) 100 yds. from l.
174¼	River 6 ft. 5 in. deep.
175½	**Ku-chia-chuang** (30 houses), 100 yds. from r.
176½	River 8 ft. deep, banks 4 to 8 ft. high.
177	**Liu-chia-chuang** (30 houses), on r.
177¼	River 8 ft. 5 in. deep.
178	The Kang Ho flows into the *Shê-yang Ho*, a fine river 150 to 200 yds. wide, and here crossed by a ferry.
	The Shê-yang Ho comes from Hwaianfu (see Route 26 B).
	Route continues NW. up the Shê-yang Ho.
179	**FOWNING,** P. (see *Gazetteer*). South suburb on north bank of river. A narrow and crooked street leads to South Gate, ¼ mile.

(C) Alternative Water Routes

Between **Haian** and **Tungtaihsien,** see Route 21 B, sect. 2.

Available when there is not enough water in the Ch'uang-ch'ang Ho at Haian.

(*a*) Via Huang-ts'un

(Distance by this route 212¾ miles)

(1) *Haian to Huang-ts'un* (25 miles)

The route lies along the Li Ho. For detailed account see Route 22, mile 57½.

(2) *Huang-ts'un to Tsintung* (13¼ miles)

Along the Huang-ts'un Ho. For detailed account see Route 24 C, sect. 2.

(3) *Tsintung to Tungtaihsien* (21½ miles)

Along the Yen Ho (No. 2). See Route 24 B, sect. 2.

(*b*) Via Taichow Ku

(Distance by this route about 239 miles)

As the Huang-ts'un Ho is somewhat shallow it may be found advantageous to make a longer detour farther west :

(1) *Haian to Taichow Ku* (44 miles)

Along the Li Ho. See Route 22, mile 57½, and Route 24 C.

(2) *Taichow Ku to Tsintung* (about 20 miles)

Along the Yen Ho (No. 2). See Route 24 B, sect. 1.

The Li Ho passes close to the South Gate of Taichow Ku, whereas the Yen Ho (No. 2) is reached at **Chao-kung-ch'iao,** 1 mile to the N. of North Gate. The two rivers meet 4 miles west of Taichow Ku at **Chiu-li-kou,** but a stone dam prevents boats from passing from the one to the other. (See also Route 23 C, mile 27¼.)

(3) *Tsintung* to *Tungtaihsien* (21½ miles)

Same as via Huang-ts'un.

ROUTE 22

TUNGCHOW TO YANGCHOW (139 miles)

Authorities : G. E. Pereira, February, 1908; Survey by Imperial Maritime Customs, 1908.

General direction W. The route lies along the Li Ho (sometimes also called Yen Ho or Yün-yen Ho). The depth of water varies according to the season of the year. At the time at which this report was made it averaged from 6 to 8 ft. The average width is from 30 to 60 yds., but it is in places as much as 70 and as little as 20 yds. There is almost as much traffic upon it as there is upon the Grand Canal. All the salt from Tungchow and Taichow Ku—both large centres of distribution—is conveyed by it. The current sets from E. to W., and if the wind be unfavourable boats have to be towed by 20, 30, or 40 men.

In exceptionally severe winters navigation is sometimes stopped for 2 or 3 days by ice.

The surrounding country is flat, and thickly covered with villages and houses among trees, chiefly willows. It is everywhere under cultivation, the first crop being spring rice and the second wheat. Houses in the towns are of brick with tiled roofs ; in the villages they are of mud and thatched. The country for the first 17 miles is, on an average, 3 or 4 ft. above the level of the water, and for the remainder from 6 to 12 ft. ; but in the first 10 miles it is in places actually below it on the left.

Four launches of the Ta-ta Company run daily between Tungchow and Siennümiao, and one between the former and Lüsze. They leave Tungchow at 8 a.m. and reach Taichow Ku at midnight. Launches are 54 ft. long, 9 ft. wide, and draw 3 ft. 5 in. Numbers of house-boats and small craft are to be seen on the river, but cargo-boats are in the majority. Wheelbarrows are plentiful on the roads. There is a single telegraph wire on the right, from Tungchow to Jukao, thence on the left to Yangchow.

There are towpaths, much used by wheelbarrows, on both banks at first ; after Sanshihlipu there is only one, chiefly on the right. Side-creeks are crossed by bridges. The removal of the planks constituting the centre span of many of the bridges to admit of the passage of launches is a troublesome and laborious performance. There are numerous ferries.

miles	
0	**TUNGCHOW,** P. T. (see *Gazetteer*). It is 1,200 yds. by road from the West Gate to small stone bridge over Li Ho in the west suburb. Bearing thence 327° for 700 yards to Ta-ta Steam Launch Company's landing-stage. Boats can leave the West Gate by the moat and, after proceeding south for a few hundred yards, join the Li Ho which runs through the west suburb. Single-line telegraph to Yangchow on r.
1½	Steam-launch station on r. River, 50 or 60 yds.

miles	
	wide, flows through a thickly populated and highly cultivated plain.
2¼	*San-li-an-ch'iao,* a stone-arch bridge over which towpath on r. passes. Creek under it goes east to Shihkiang, said to be 50 li (17 miles) distant.
3	Plank bridge over creek going east. Direction NW.
5¼	**Tangkiacha,** P. (about 100 houses), on l. with large cotton and flour-mills. Here wooden bridge on eight piers over river, which is about 70 yds. wide.
7¼	River 8 ft. deep, 35 to 50 yds. wide. River-level higher in places than country on l.
9¼	**Yün-t'ai-shan** (40 houses), on l., with creek going south. Many rafts here.
10¼	**Sanshihlipu,** P. (about 400 houses, chiefly on l.), with single-arch stone bridge. Direction N.
13½	**Ssŭ-shih-li** (40 houses), on l. A creek to west. Banks usually about 3, sometimes 6 ft. high, first on one side and then on the other.
17½	**Wu-shih-li** (30 houses), on both banks. Country 5 to 8 ft. above river-level.
18½	Country 4 ft. above river-level.
19½	*Wên-fêng-kuo* pagoda on l., where river makes a bend to east for 50 yds.
20½	**Paipu,** P. (300 houses), on both banks, with three bridges (first and third of stone, central one of wood). Direction NNW.
25¼	**Lin-tzŭ** (150 houses, mostly on r.), with a wooden bridge. Centre span removable. River 11 ft. deep; banks and level of country 8 to 12 ft. above water.
27¾	River 7 ft. 5 in. deep.
30¼	Country 4 ft. above river-level on l., 8 to 12 ft. on r.
30¾	**Tingyen,** P. (100 houses), on r. River 5 ft. 11 in. deep. Wooden trestle bridge, planks of centre span removed for passage of steam-launches, &c.
35	River makes a bend WNW. for 600 yards, then

miles	
	again NNW. Country and banks 6 to 10 ft. above river-level. Towpath on r. Some irrigating wheels along banks.
36¾	**Tung-ch'êng** (pronounced Tung-ch'ên), 200 houses, on r., with a trestle bridge similar to that at Tingyen. Direction NW.
39¾	**Shih-li-p'u** (10 houses), on r. River turns west.
43	**Jukao,** P. T., a walled city, on l. Brick wall, 30 ft. high, in good repair. Route passes under a stone bridge near East Gate, with centre span of movable planks. Similar bridges near North Gate and in north suburb. Here telegraph line (single wire) crosses to l. bank. North Gate has a double gateway ; near it a water-gate in the city wall. A moat round the city. Direction N., passing through small north suburb. River now about 30 yds. wide. Banks 8 to 10 ft. high (in many places an additional 3 ft. embankment along r.).
48¾	**Ch'ai-wan** (50 houses), on r. Creek on r., passing under low stone bridge. River 30 to 40 yds. wide, banks and country 10 to 12 ft. above river-level.
50¾	**Yu-fang-t'ou** (50 houses), on l.
54¾	**Lifakiao,** P. (50 houses), on r. High single-arch stone bridge over creek running east. Direction NW.
57	**Hsiao-hai-an** (5 houses), on r. Banks 6 to 8 ft. above river-level.
57½	**Haian,** P. T. (400 or 500 houses), chiefly on r. A straggling town nearly a mile long, with two bridges, one of wood, the other of stone, both with centre span of planks removed for passage of steam-launches.
58¼	Haian ends. Direction WSW.
63	**Hu-chia-chi** (150 houses), on both banks.
65¼	**Ch'ing-ming-chiang** (100 houses), on both banks. Wooden trestle bridge with movable centre span of planks. Banks 10 to 12 ft. above river-level.
67¼	**Kütang,** P. (300 houses), on both banks. Two

miles	
	wooden trestle bridges with movable centre span of planks. Just before reaching second bridge river narrows to under 20 yds. till passing it.
67½	Banks 6 to 10 ft. high.
71¾	**Pai-mi,** village on both banks.
72½	**Hsiao-pai-mi,** village, with a trestle bridge.
79	**Kiangyen,** P. T., village on both banks, with two bridges across river.
82¼	**Huang-ts'un,** village. A small river runs north to Tungtaihsien ; see Route 24 C, sect. 2.
	For details between Huang-ts'un and Taichow Ku see Route 24 C, sect. 1.
98¼	**TAICHOW KU,** P. T., an important city (see *Gazetteer*). S. Gate of city about ½ mile to N.
100½	On the r. the *Ta Ho* leaves the Li Ho and is separated from it by a stone dam (see Route 24 A).
100¾	**Chiu-li-kou** (100 houses), on r.
102	**Shên-chia-tu** (100 houses), on r.
102½	**Yen-k'ou** (10 houses), on l. Beyond the village, the *Shih Ho,* a creek, goes off to l. (see Route 23 C, mile 25½).
103	Route turns NNE.
104	**Chieh-kou,** on r. Beyond village route turns sharply SW.
109½	**Kuang-fu-ch'iao,** on r. Route bends NW. ; after 2 miles bends again SW.
113¼	**Pai-t'a-ho,** village at the junction of the Li Ho and the *Pai-t'a Ho,* a creek discharging into the Yangtse River at Sankiangying (13 miles to S.).
115¼	**Yi-ling,** on r.
122	**Siennümiao,** P. T.
	A creek (called Sin-ni-mu on Admiralty Chart 2809) leads to the Yangtse River.
125¼	Route turns N.
129½	**Liu-cha** (' Sixth Lock '), where the Li Ho joins the *Grand Canal.* All exits from the Grand Canal into

miles

the Li Ho are said to be dammed, with the exception of the eastern one at Liu-cha.

Direction S. along Grand Canal. For details see Route 19, sect. 1.

139[1] **YANGCHOW,** P. T., an important city on the Grand Canal (see *Gazetteer*).

ROUTE 23

KOWAN (ON YANGTSE) TO TAICHOW KU

Authorities: G. E. Pereira, February, 1908; Survey by G. E. Pereira and Dan Sing, 1908.

(A) Land Route (about 10 miles)

General direction N. Road 8 to 12 ft. wide, fairly good, and much used by wheelbarrows. It often approaches the river, narrows to a footpath near bank of Yangtse, but becomes wider at Kowan. It runs to the E. of the Kuo Ho and crosses over to the other bank about ½ mile S. of Taichow Ku.

(B) Water Route (21 miles)

Along the *Kuo Ho* (also called Kowan Creek?). It is dammed at Taichow Ku to prevent the water of the Li Ho from flowing into the Yangtse. The dam is known as *T'êng-chia-pa*. On the S. side of it numerous cargo-boats are loaded with rice, beans, bean-cake, wheat, &c., to be shipped down the Kuo Ho to junks at anchor off Kowan, which convey them to Ningpo and Shanghai. Traffic considerable during high river (depth 4 to 5 ft.). The depth in February, when water is low, varies considerably, the shallowest being

[1] From Taichow Ku to Liu-cha distances were measured on the Imperial Maritime Customs' Survey. According to Pereira (who estimated these distances by time) Taichow Ku to Siennümiao is about 27 miles, and Siennümiao to Liu-cha 10 miles.

1 ft. 4 in., and the deepest 9 ft. 3 in., but as it changes every few yards it would require constant sounding. Current is to the south; water muddy. It is 60 ft. wide for the first $2\frac{1}{4}$ miles, narrowing down to 20 to 35 ft. in the next 8 miles; after which it widens to 25 to 35 yds. and narrows again to 15 to 20 yds. near Taichow Ku.

It traverses a very fertile country, covered with villages and houses among trees (chiefly willow), built for the most part of mud with thatched roofs. A few brick houses in larger villages. When the Yangtse is in flood the current is driven northwards. River is extremely tortuous in its course, but becomes more or less straight in the last $5\frac{3}{4}$ miles. Many creeks run into the river; those from the W. usually dammed, or with only a small outlet; those from the E. with a clear entrance. Towing mostly on l. Banks usually about 12 ft. above river-level. River crossed by several bridges, usually of planks and mud supported by wooden trestles.

Creeks on l. usually crossed by side bridges, but mostly unbridged on r. The average house-boat is 37 ft. 3 in. long, 7 ft. 5 in. broad, with cabin 6 ft. high (floor 3 ft. 1 in. lower than deck), and 16 ft. long, and draws 1 ft. of water. If filled with cargo of rice it draws 2 ft. 5 in. In narrow places (especially opposite Tiaokiapu) two boats can only pass one another with difficulty. Boats can go from the Kuo Ho to the North Gate at Taichow Ku by the Shih Ho, a creek just above Shih-fang-k'ou, flowing NW., and avoid the T'eng-chia-pa (see Alternative Route C).

In an exceptionally severe winter the Kuo Ho may be frozen for 10 to 11 days; but it was stated in 1908 that this had not happened for 10 years.

miles	
0	**Lung-wo-k'ou** (called locally Lung-wu-k'ou), at the mouth of Kuo Ho. 10 houses on the east. One or two war-junks stationed off it. About 600 yds. below junction with Yangtse is a large island extending to the east (**Ki-ying** or Low Island on Admiralty Chart). Road, at first only a footpath, widens after $\frac{3}{4}$ mile.

miles	
2	**Kowan,** P. (500 houses), mostly on the r., with a stone bridge on two stone piers. Centre span covered by movable planking 10 yds. long. Length of bridge 37 yds., breadth 12 ft., centre span 20 ft. high. River 15 to 20 yds. wide. Embankment 15 to 20 ft. high. Good 5 ft. road near l.
2¼	River 60 ft. wide, winds in long zigzags.
3¼	**San-yi-wei** (30 houses), on r. River 40 to 50 ft. wide.
4	*Hsien-ch'a-t'ang* River, 30 ft. wide, and crossed by a trestle bridge, flows in from the NW., connecting with Yangchow. Only small boats use it.
	Country mostly low-lying. Rice-fields with 12- to 15-ft. embankments, or higher ground alongside river.
4½	**San-chi-t'iao** (13 houses), on r. River 25 ft. wide.
5½	River 4 ft. deep.
7½	River 1 ft. 8 in. deep.
8¾	River 2 ft. 3 in. deep, and 30 to 40 ft. wide.
9½	River 35 ft. wide.
10¼	**Tiaokiapu,** P. (300 or 400 houses), on r. River 2 ft. deep. Stone bridge, single span, 15 ft. wide, 13 ft. high, at place where river narrows to 20 ft. Towpath on l.
11¼	River 1 ft. 4 in. deep, 15 to 20 yds. wide.
12	Ferry. River 4 ft. 8 in. deep.
12¼	River 2 ft. deep, 30 yds. wide.
12¾	**Nan-miao-t'ang** (3 houses), on l. Plank and earth bridge on ten trestles ; centre span 15 ft. wide, 13 ft. high. River 25 to 30 yds. broad, 3 ft. 8 in. deep.
14½	**Miao-wan** (200 houses), on l., with bridge of 5 trestles, centre span 13 ft. high, 15 ft. wide. River 25 to 30 yds. wide. Depth below, 3 ft. 9 in., increasing to 8 ft. River makes an almost circular bend.
15¼	Stream from Taihing, P. T. (about 25 miles distant), comes in on r.
	River becomes straighter.
16	**Shih-fang-k'ou** (90 houses), on both banks. River 25 to 30 yds. wide. Wooden bridge standing on two

miles	
	stone piers and three wooden trestles ; centre span 15 ft. high and of equal width.
16¼	*Shih Ho*, a small creek, joining on l.
17	**T'êng-chia-ch'i** (15 houses), on r. A ferry.
17¼	**Shih-li-p'u** (50 houses), on r.
18½	**Li-chia-chuang** (70 houses), on l., 200 yds. below which a partially dammed creek, the *Lao-hu-pa*, joins in on l.
18¾	River 35 yds. wide, 4 ft. 6 in. deep.
19	**Wang-shih-liu** (30 houses), 100 yds. from r.
19¾	**Chang-chia-pao** (50 houses), on r.
20½	*Pao-tai-ch'iao*, a stone bridge over river, with movable planks as roadway. It is in a rather dilapidated state, and is of single span, about 14 ft. wide and of equal height. 200 yds. below bridge river widens to from 30 to 35 yds. Main road crosses to r., and goes some way from river. Smaller wheelbarrow road along l. A great many side-creeks give into the river, those on l. mostly dammed.
21	**TAICHOW KU,** P. T., an important city (see *Gazetteer*). South suburb on the Li Ho (or Yen Ho). The entrance to the *Kuo Ho* (or Kowan Creek) is blocked by the *T'êng-chia-pa* dam. It is of earth, and is used as a roadway, 27 yds. long by 12 yds. wide, with a barricade of planks on either side.
	River at end 15 to 20 yds. wide and 8 ft. deep, flowing between 12-ft. banks. Towing chiefly on l., on which side are some fair 5- to 8-ft. wheelbarrow roads.

(C) Alternative Water Route (31¾ miles)

General direction, first NW. to Yen-k'ou, then E. to Taichow Ku.

This is a route by which boats starting from Kowan can ascend the Kuo Ho as far as Shih-fang-k'ou, and then instead of continuing N., go NW. up the *Shih Ho* for 9½ miles, entering the *Li Ho* at Yen-k'ou. From here Taichow Ku can be

reached without having to encounter the T'êng-chia-pa dam which blocks the entrance from the Kuo Ho into the Li Ho. In February, when the water is still low, the depth in parts is no more than 8 in., and for some distance only 1 ft. In places there is not even room for two comparatively small boats (7 ft. wide) to pass.

The Shih Ho flows S. from the Li Ho at Yen-k'ou, and turns east just before reaching Ch'ien-yen-t'a, joining the *Kuo Ho* 200 or 300 yds. above the bridge at Shih-fang-k'ou.

Towpaths mostly on l. of Shih Ho ; but as there are many unbridged side-creeks (or short irrigating channels) there are constant interruptions to towing. The Li Ho has a regular towpath along the north bank, and the side-creeks are bridged. Bridges over the Shih Ho have all a span of 10 ft. and an equal height above the water-level. Most of them are built of wood and earth on two wooden trestles. The country traversed by the Shih Ho is everywhere under cultivation, and villages (surrounded by trees) are numerous. It is the same along the Li Ho up to Taichow Ku. Country along both rivers 10 to 12 ft. above water-level. Many side-creeks join both the Shih Ho and Li Ho, and the country is a network of rivers and canals.

miles	
0	**Lung-wo-k'ou.** For details to mile 16 see Alternative Route B.
16	**Shih-fang-k'ou,** 5 miles below the *T'êng-chia-pa* dam. Two or three hundred yards above the bridge at Shih-fang-k'ou the *Shih Ho* flows from the WNW. into the *Kuo Ho*, under a broken bridge. Shih Ho is 15 to 20 yds. wide, and 4 ft. deep.
16¾	Stone bridge with roadway of three stones, each 12 ft. long and 2 ft. wide, laid alongside each other.
17¼	**Ya-chuang** (50 houses), on r. Two trestle bridges below the village. River 5 ft. deep.
18¾	River 2 ft. deep. **Yen-t'a,** a straggling village, said to have over 1,000 houses, ¼ mile to north.

miles

$19\frac{3}{4}$ **Ch'ien-yen-t'a** (pronounced locally Ch'i-yen-t'an), 200 houses, on r., surrounded by creeks.

$20\frac{1}{4}$ Trestle bridge.

$20\frac{3}{4}$ **Pien-chia-ch'iao** (pronounced locally P'an-chia-ch'iao); 100 houses, mostly on l. (west), with a trestle bridge.

$21\frac{1}{4}$ River 20 to 30 ft. wide, 1 ft. 4 in. deep. Towpath on r.

$21\frac{3}{4}$ River 15 to 20 ft. wide.

22 Ferry. **T'ang-tzŭ** (100 houses), on l. As it passes this place the river bends to east and then turns north. River 8 in. deep for about 300 yds. opposite village, then mostly 1 ft. Trestle bridge over river, which then narrows to from 10 to 15 ft.

$23\frac{1}{4}$ Trestle bridge. River turns east for 200 or 300 yds. **Yü-chia-fên** (300 houses), $\frac{1}{4}$ mile to north. River again turns north, 20 to 30 ft. wide, and deeper.

$24\frac{1}{4}$ **Ni-chia-chiang** (pronounced locally Ni-chia-gang), 50 houses, with a trestle bridge. River 30 to 40 ft. wide, 2 ft. 7 in. deep.

$25\frac{1}{2}$ **Yen-k'ou** (pronounced locally Ying-k'ou), 10 houses on r., with a trestle bridge. River 1 ft. 8 in. deep. Here the *Shih Ho* joins the *Li Ho*, which is 35 to 40 yds. wide, and 8 ft. 1 in. deep. Towpath along north bank, where are numerous side-creeks, all bridged; those on south bank mostly unbridged. Country about 12 ft. above level of river, with many villages among trees. Direction east. Single telegraph wire to Yangchow, near south bank.

26 **Shên-chia-tu** (100 houses), on l. Ferry.

$27\frac{1}{4}$ **Chiu-li-kou** (100 houses), on l., with a ferry.

A creek (*Ta Ho*) runs NE. from here, connecting with the *Yen Ho* (No. 2) W. of **Chao-kung-ch'iao.** The latter is 4 miles distant, and 1 from the North Gate of Taichow Ku. The Yen Ho (No. 2) has a further connexion with Taichow Ku by a creek from **T'ai-**

miles	
	chia-shih, 1 mile east of Chao-kung-ch'iao, ending at the Pao-chia-pa dam, opposite the East Gate. See Route 24 B.
28¾	**Ta-p'u-k'ou** on l., where moat round west side of Taichow Ku branches off to north. The Li Ho continues for ¾ mile to the *T'êng-chia-pa* dam, nearly due south of the *South Gate* of Taichow Ku. The Li Ho is crossed by a stone bridge about 100 yds. to the west of the T'êng-chia-pa dam.
31¾ [1]	**TAICHOW KU,** P. T. (see *Gazetteer*). Route ends at North Gate of city.

ROUTE 24

TAICHOW KU TO YENCHENG KU

Authorities: G. E. Pereira, Feb. 1908; War Office MS. maps of N. Kiangsu.

There are several alternative water routes, the most important being :

(A) By the Ta Ho (about 76 miles)

General direction NNE. This is the most direct route. The Ta Ho (or Ch'êng Ho) leaves the Li Ho at Chiu-li-kou (1½ miles W. of Taichow Ku) and is here separated from it by a stone dam so that boats cannot pass from one to the other (communication may be possible through side-creeks ?). The river is always navigable.

miles (approx.)	
0	**Chiu-li-kou** (1½ miles W. of **Taichow Ku**).
2	Here the Yen Ho (No. 2) branches off east to **Chao-kung-ch'iao** 1 mile north of the North Gate of **Taichow Ku** (see Route 24 B).
5	**Kangmen,** P.
15	**Chu-chia-chuang.**

From Yen-k'ou to Taichow Ku distances have been measured on the map. According to Pereira, Yen-k'ou to Shên-chia-tu is ¾ mile, Shên-chia-tu to Chiu-li-kou 1¾ miles, and the total route 32½ miles.



SALT-BOAT

miles (approx.)	
36 [1]	**Hinghwa,** P. T.
51½	The creek enters and crosses the SE. corner of the *Ta-tsung* Lake.
58½	Route leaves the lake, turning NE.
69½	The *Tung-kuan Ho,* a creek, flows in on r.
71¾	**Kangkow,** P., on l.
76	**YENCHENG KU,** P. (see *Gazetteer*). The Ta Ho flows into the *Ch'uan-ch'ang Ho,* near W. Gate.

(B) By the Yen Ho (No. 2) [2] (about 94 miles)

The Yen Ho (No. 2) branches off from the Ta Ho 2 miles N. of Chiu-li-kou (see Route 24 A), about 21 miles E. of Shaopo, as the crow flies. The stone dam at Chiu-li-kou prevents direct communication with the Li Ho and the city of Taichow Ku. After its separation from the Ta Ho the Yen Ho (No. 2) runs east and passes through Chao-kung-ch'iao, the port of Taichow Ku, about 1 mile N. of the North Gate, and 4 miles from Chiu-li-kou. Steam-launches to Yencheng Ku start from here and run regularly all the year round. Many salt boats. The river is said not to freeze in winter.

This route includes the following sections:

(1) *Taichow Ku to Tsintung* (about 20 miles)

Direction NE.

miles (approx.)	
0	**Chao-kung-ch'iao,** port on the Yen Ho (No. 2), 1 mile north of **Taichow Ku.**
1	**T'ai-chia-shih,** a creek connects with E. gate.
10	**Yüsi,** P., on l.
20	**Tsintung,** P. (over 2,000 houses) on l. The *Huang-ts'un Ho* runs in from the south (see Route 24 C, mile 32¼). Another creek goes north to Hinghwa.

[1] According to Pereira the distance to Hinghwa is 39 miles.

[2] This creek is called *Yen Ho* (No. 2) to distinguish it from the *Yen Ho* (No. 1), described in Route 28 A. The name *Yen Ho* (Salt River, i. e. river used by salt-boats) is also sometimes given to the *Li Ho* (see Route 22).

(2) *Tsintung to Tungtaihsien* (21½ miles)

General direction NE.; along the Yen Ho (No. 2). The water is clear and there is no current. For the first 2½ miles it varies in width from 80 to 120 yds.; afterwards from 50 to 60 yds. Its depth is from 5½ to 10½ ft.; but it is for the most part over 8 ft. For the first 7 miles the surrounding country is from 1 to 3 ft. above the level of the water. On either side are rice-fields or reeds, with villages behind, some 2 miles distant. Subsequently the level of the country rises to 4 ft. above water-level, and villages near the bank become more numerous. Side-creeks unbridged and fewer.

miles	
20	**Tsintung,** P. River 120 to 150 yds. wide; 8 ft. deep. Many unbridged creeks on either bank, and no towpath. Boats sail or are poled. Many small boats, and a certain number of salt-boats for Taichow Ku. Rice-fields 4 ft. above river-level on l.; on r. only a few inches and country covered with reeds. Floods when water high.
21	River 80 to 100 yds. wide.
21¾	Rice-fields on r., 3 ft. above water-level; reeds and low-lying country on l.
22¼	**Ch'ing-p'u** (65 houses), on r. River 200 yds. wide. Mostly reeds and low-lying country on both banks. River 50 yds. wide, 5 ft. 6 in. deep.
23	A creek 50 yds. wide continues ENE. to Wu-fang and Fuan Ku, P. Route turns N. Banks and country 1 to 3 ft. above river-level; mostly rice-fields on l., reeds on r.
24¼	River 10 ft. deep. Creek, 40 yds. wide, comes in from NW.
24¾	Belt of rice near r., with reeds behind, extending for about a couple of miles. River 80 yds. wide, and at this point another creek, 40 yds. wide, comes in from north.

miles

25 River 8 ft. 9 in. deep. **Ts'ao-yeh-chuang** (locally called So-sa), 500 houses, some of brick, on r. Three small creeks, crossed by trestle bridges with planks, come through town.

25¾ Country and banks 3 or 4 ft. above river-level. Reeds ½ mile from r.

27 River from Hinghwa, bearing 278°, goes east to Fuan Ku and the sea.

Yen Ho (No. 2) 60 yds. wide, 8 ft. 6 in. deep. Reeds no longer visible from banks.

27¼ **Huang-pei-ch'ung** (Huang-bok-sung), 20 houses, on l. **T'ao-shu-chuang** (80 houses), ¼ mile from r. on Hinghwa to Fuan Ku creek.

28¾ **Shihyen,** P. (200 houses), a steam-launch station, with an inner harbour on r. Bridge over a creek in town. River 10 ft. 5 in. deep. Country now mostly 4 ft. above river-level on l., and 3 ft. (with 6 ft. embankment) on r. Side-creeks fewer and unbridged.

Towing again possible, chiefly on l. Villages more numerous, usually about a mile from banks.

29¾ **Ch'i-chia-lou** (Ch'ih-chia-no), 80 houses, 100 yds. from r. River 10 ft. deep.

30¾ River 11 ft. 2 in. deep.

31½ **Hsin-pa-chia,** village of 24 houses, on r., with plank bridge over a side-creek extending inland for ½ mile. (It is said to be 32 li from Tsintung and 28 li from Tungtaihsien.)

River 60–65 yds. wide; 6 to 8 ft. embankment, about 20 ft. wide, and sloping away from river along r., followed by towpath. Smaller embankment in places along l. Country 4 ft. above river-level, and cultivated with rice. Scattered villages. Fewer side-creeks (more on l. than on r)., still unbridged.

32¼ **Wu-chia-to** (60 houses), ½ mile from r. River 8 ft. 8 in. deep.

32½ Unbridged creek, 15 yds. wide, on r.

miles	
33	Unbridged creek, 20 yds. wide, on r.
33½	**Kuo-chia-pao** (80 houses), 500 yds. from l. River 8 ft. 5 in. deep. Unbridged creek on r., 15 yds. wide.
33¾	Unbridged creek on r., 20 yds. wide.
34	River 6 ft. 3 in. deep in centre ; deeper near l. In next 700 yds. are three unbridged creeks, each 20 yds. wide, on r.
34¾	**Ts'ao-yin-tu** (20 houses), on r.
35¼	Two unbridged creeks (15 and 20 yds. wide) on r. River 6 ft. 10 in. deep in centre ; deeper on l.
35¾	Creek 20 yds. wide on r., crossed by plank and trestle bridge. **Hsia-chia-shê** (called locally Hsia-ga-sa), 20 houses, 300 yds. from r. River 9 ft. 2 in. deep on l.
36½	Unbridged creek on r., 15 yds. wide. River 9 ft. 8 in. deep in centre. Towpath on l. for rest of way. Unbridged creeks more numerous on r.
36¾	*Liang-to Ho*, 40 yds. wide, flows SW. to Liang-to into the *Ch'uan-ch'ang Ho*, which joins the Li Ho at Haian.
37¼	**Yin-chuang** (60 houses), on l. Cross side-creek, 12 yds. wide, by single-arch stone bridge. River 50 yds. wide. Embankment, 10 ft. high, along r., up to Tungtaihsien. Crops in field are wheat, beans, &c. Villages numerous.
38	Plank bridge on l. over side-creek, 20 yds. wide. **Ch'ih-lang-chuang** (40 houses), 100 yds. l. River 8 ft. 2 in. deep.
38½	Cross side-creek, 10 yds. wide, by plank bridge on three trestles. River 60 yds. wide.
38¾	**Hsü-chia-shê** (called locally Ch'u-chia-sa), 40 houses, 400 yds. l.
39	Country on l. 8 ft. above river-level. Plank and trestle bridge on l. over *Hsi-ch'i* creek, which rejoins Yen Ho (No. 2) 2½ miles farther on. It is crossed by a stone bridge about ¼ mile farther up.

miles

$39\frac{3}{4}$ Seven-storied pagoda (rather decayed) near l. **Hsi-ch'i** (200 houses), 200 yds. from l., with large *T'ai-shan-miao* temple. Yen Ho (No. 2) 50–60 yds. wide, 8 ft. 5 in. deep.

$40\frac{1}{4}$ River 9 ft. deep. Unbridged creek, 10 yds. wide, on l.

$40\frac{1}{2}$ Yen Ho (No. 2) here bifurcates, one branch going NE. and joining the *Ch'uan-ch'ang Ho* at the SW. corner of Tungtaihsien, subsequently turning south to Fuan Ku and Haian, where it joins the *Li Ho*. The other branch, which is that followed by this route and by boats going north, goes NW.

$41\frac{1}{4}$ Yen Ho (No. 2) rejoined by *Hsi-ch'i* creek, here 40 yds. wide, and crossed by a plank bridge on five trestles. Direction NE.

$41\frac{1}{2}$ **Tungtaihsien,** P. T. Yen Ho (No. 2) joins the *Ch'uan-ch'ang Ho* which then flows north to Yencheng Ku. The junction is on the NW. side of the city, to reach which boats ascend the Ch'uan-ch'ang Ho, here 15 yds. wide, 6 ft. 3 in. deep. Direction NE. for $\frac{1}{2}$ mile through the city, passing under two plank bridges. It follows a winding course from here, and is some 30 yds. wide, and of varying depths. It is crowded with boats (see *Gazetteer*).

(3) *Tungtaihsien to Yencheng Ku* ($52\frac{1}{2}$ miles)

(For details see Route 21 B, sections 3 to 5.)

(C) By the Li Ho and Huang-ts'un Ho ($106\frac{1}{4}$ miles)

This route is longer but avoids rivers with dams. It joins Route B at **Tsintung.**

(1) *Taichow Ku to Huang-ts'un* (19 miles)

Direction eastwards along the *Li Ho.* The river is for the most part some 35 yds. wide, and from 5 to $6\frac{1}{2}$ ft. deep. The water is muddy and there is no current. The country

is about 12 ft. above the level of the water; for the last 4½ miles, 8 to 10 ft., with an additional embankment, 3 to 4 ft. high. The land is highly cultivated, and there are many villages surrounded by trees, joined to one another by wheelbarrow tracks. There are many subsidiary channels, either giving into the Li Ho or separated from it by dams. The towpath, which as far as Tangwan is on the S. bank, and afterwards on the N., is carried over the many creeks by roughly constructed plank bridges incapable of bearing any great weight. The houses in the villages are of mud, and thatched; in small towns they are of brick with tiled roofs.

Land transport for the most part by wheelbarrow; but there are a few two-wheeled carts. There are many boats on the river. A single telegraph wire runs along the S. bank to Yangchow.

miles	
0	**TAICHOW KU,** P.T., *North Gate.* Route follows the moat (known as the *T'ien-tzŭ Ho*) eastwards, from the North Gate. Current flows to the east. Moat about 150 yds. wide.
1	NE. corner of city. Direction south. Moat 7 ft. 4 in. deep in centre. Beyond graves on l., flat, cultivated plain, with many villages among trees.
1¾	Broad dam of earth, with roadway across moat from East Gate. T'ien-tzŭ Ho has a channel making a semicircular bend round east side of this dam, passing **Pao-chia-pa** on left (about 300 yds. from East Gate), a village of about 200 houses.
	T'ien-tzŭ Ho, 5 ft. deep, passes under a single-arch stone bridge, 20 ft. wide, and 24 ft. high, and rejoins city moat below the dam.
	Along the moat, nearly to South Gate, just before reaching which the main channel turns south and joins the Li Ho opposite
3	*T'ien-tzŭ Temple,* about ½ mile south of the South Gate. Just before entering the Li Ho, channel passes

miles	
	under a bridge with two stone piers, 18 ft. span and 20 ft. high.
	Direction E. along the Li Ho, which is about 35 yds. wide, water rather muddy, 6 ft. 3 in. deep. Towpath on south, through suburb.
4½	**Lien-hua-ch'ih** (called locally Ni-hua-tzŭ), a straggling village of about 200 houses, on both banks; with a ferry. River 6 ft. deep.
6¼	Unbridged creek, on south bank.
7½	A ferry. **Ts'ao-yü-chuang** (50 houses), on south bank.
8½	**Tangwan,** P. (200 houses), on both banks. Towpath on north bank, up to Huang-ts'un.
10	**Chiang-chia-ho** (40 houses), on north bank.
11	**Lu-chia-ho** (40 houses), on south bank. A ferry.
11⅓	**T'ao-chia-chuang** (100 houses), 100 yds. to NNE.
12¼	**Ta-fêng-tien** (200 houses), on both banks. Ferry.
14½	**Hsiao-fêng-tien** (50 houses), on north bank. Ferry.
15	Ferry over entrance to side-creek, on north bank.
16	*Lung-ching-ch'an-yüan*, temple on north bank. Ferry.
17	Ferry.
17½	Two unbridged creeks, on north bank. Houses from here continuous along south bank to Huang-ts'un.
18	Unbridged creek, on north bank, with ferry.
19	**Huang-ts'un** (about 100 houses), on both banks of the Li Ho.

(2) *Huang-ts'un to Tsintung* (13¼ miles)

Direction N. Route is along the *Huang-ts'un Ho*, which for 9½ miles flows N. From this point there is no appreciable current, and the water becomes clear. The river for the first 5¼ miles is 40 to 45 ft. wide; banks and surrounding country 8 to 12 ft. above water-level. For the next 2½ miles the

width is from 60 to 120 ft., and the height of banks 3 to 4 ft. For the rest of this section, in consequence of the banks being only 3 to 4 in. high, the country is continually being flooded, at times becoming practically a lake. Towing becomes impossible for the last 4 miles. At first there is a towpath, sometimes on one side and sometimes on the other. The side-creeks are either dry or crossed by a plank and trestle bridge 40 to 45 ft. long. The path after 8 miles degenerates into a narrow track, finally disappearing, and the creeks are unbridged.

The river itself is crossed by several trestle bridges, with roadways of planks ; centre span 15 ft. long and 10 ft. high, capable of removal to admit of the passage of larger boats.

In the first part of this section the character of the surrounding country is similar to that in the preceding one. From the ninth mile onwards it changes considerably. The low-lying region of the *Hsia-ho* is reached. There are no villages within a couple of miles of the banks, and the country is all under rice or reeds.

The houses in the towns and villages are similar to those in Section 1. Bullocks, pigs, and fowls are plentiful. A few farm-carts might be obtained in the villages near Huang-ts'un.

In very severe winters the Huang-ts'un Ho is frozen, and traffic suspended.

miles	
19	**Huang-ts'un.** The route leaves the *Li Ho*, which continues east to Kiangyen and Tungchow (see Route 22), and turns north into the *Huang-ts'un Ho*. No dam at entrance, but there is a weakly constructed plank and trestle bridge.
20	River 2 ft. 8 in. deep.
20¼	Plank bridge, on five trestles, over river.
	Shih-chia-tai (50 houses), 100 yds. to l.
20¾	River 2 ft. 8 in. deep.
21¼	**Shou-shêng-ssŭ** (100 houses, mostly brick), on r. A plank bridge, on six trestles, over river, 4 ft. 2 in. deep.

miles

22 River bends east.

A creek, 30 ft. wide, connecting with the *Hsia Ho* at Pao-chia-pa[1] (opposite East Gate of Taichow Ku) comes in on west.

22¼ Plank bridge on four trestles over river, here 4 ft. 2 in. deep. Country now 8 ft. above river-level. Towpath on l.

22½ Creek, 25 ft. wide, goes east 3½ miles to **Kiangyen.** Direction north. River 40 ft. wide.

23½ Plank bridge on five trestles over river.

Ya-kou-t'ou (50 houses), on both banks. River 3 ft. 4 in. deep.

24 Ferry. River 60 to 70 ft. wide. Towpath on r.

24¼ Country here rice-fields, and 3 or 4 ft. above river-level. Villages a couple of miles away. Narrow track along banks. River 100 ft. wide.

Another large creek on l. from Pao-chia-pa. Side-creeks every 300 or 400 yds. on either bank, all unbridged, and from 60 to 120 ft. wide.

Hung-chia-chuang (150 houses), ¾ mile to r.

25¾ River 8 ft. deep.

26¼ **Hsiao-yang-chuang** (50 houses), ½ mile up creek to west.

26¾ Country on r. (and in places on l.) only a few inches above river-level, covered with reeds, and flooded in rainy season.

27½ River 100 to 120 ft. wide. **Huang-t'ien-ts'ao-tang** (5 houses), on r. Low-lying country covered with reeds on l. Main channel makes a bend west for 200 yds., then turns north again; smaller channel goes on straight.

28 River 75–90 ft. wide, 3 ft. 7 in. deep.

28¼ Small channel rejoins main river, here 100–120 ft. wide.

[1] All or most of larger creeks coming in on west are said to connect with Pao-chia-pa.

miles	
28½	Rice-fields, and country 3 or 4 ft. above river-level. Marsh extends westwards a short way from l. Side-creeks increase in number, and towing rarely possible up to Tsintung. River 6 ft. 10 in. deep, clear water, and no current. Villages in distance.
29¼	**Hu-nan-chuang** (150 huts), on l. River 7 ft. deep and opens out to 100 yds. and over in width, between marsh and reeds.
30	River widens to over a mile. Villages about 4 miles distant on r.
30¼	**Hu-hsi-chuang** (150 houses), 1 mile to l. River 4 ft. 4 in. deep, again narrows to 120 ft. between reeds and marsh.
30¾	**Hu-pei-k'ou** (100 houses), ½ mile to l. River 180 ft. wide. Route is to r. of reeds in centre of channel.
31¼	River makes a bend to r.; 120 ft. wide, 9 ft. deep, through rice-fields. Villages 4 miles to r.
32¼	**Tsintung,** P. (over 2,000 houses), on l. Huang-ts'un Ho here joins *Yen Ho* (No. 2).

(3) *Tsintung* to *Yencheng Ku* (74 miles)

Beyond **Tsintung** the route is identical with Route 24 B, sections 2 and 3.

ROUTE 25

YENCHENG KU TO THE GRAND CANAL AND TO THE SEA

Authorities: G. E. Pereira, 1908; War Office MS. maps of N. Kiangsu.

From Yencheng Ku the Grand Canal can be reached by water, either at **Liu-cha** (8 miles N. of **Yangchow**) or near **Hwaianfu.**

(A) Yencheng Ku to Liu-cha

General direction SSW. This route is via **Taichow Ku** (see Route 24) and from there to **Liu-cha** (see Route 22, mile 98¼). N.B. by following Route 24 C rivers with dams are avoided.

The distances are: by Route 24 A, about 105 miles; by Route 24 B, about 127 miles; by Route 24 C, 135 miles.

(B) Yencheng Ku to Hwaianfu (about 77 miles)

General direction westerly. For the first 16½ miles (i.e. to a point ¾ mile SW. of Shangkang) the route is identical with Route 21 B, section 6. It lies along the *Ch'uan-ch'ang Ho* for the first 2½ miles; then along the *Shangkang Ho* for the next 14 miles; and beyond Shangkang on the *Ta-shih-wan Ho*.

miles (approx.)	
0	**YENCHENG KU,** P. (see Route 21 B, sect. 6).
16½	About ¾ mile SW. of **Shangkang,** P., the *Ta-shih-wan Ho* is entered. Width 30 yds. Direction WSW.
	Beyond this stage no details are available, but the river is to some extent navigable and probably follows the course detailed below.
25½	Route turns S.
28½	Route turns W.
31½	**Hu-to,** on l. Route bends S. for 1 mile, then W. again.
35½	Route bends S.
37	**Hungkiao Ku N,** P., on r. Route turns W.
41½	**T'ing-ta-ch'iao,** on r.
42½	*Ta-tsung* Lake is entered beyond bridge. Direction W.
47½	Route leaves lake and enters creek at W. of spit of land. Another creek leaves the lake 2 miles farther S., also leading to Grand Canal.
53½	**Liu-chun-kou,** on r.
54½	Route bends N. for 1 mile.

miles (approx.)	
55½	Route turns W. and joins creek from Fowning (see Route 26 B, mile 41).
60½	**Ching-k'ou.**
73½	Route turns S.
74½	**HWAIANFU,** P. T. (see *Gazetteer*). *East Gate* Creek winds along E and S. walls.
77	Creek enters Grand Canal S. of Hwaianfu.

(C) Alternative Route to Hwaianfu (about 105 miles)

Instead of turning W. at **Shangkang** continue north to **Fowning** (Route 21 B, section 6), and from there to **Hwaianfu** by the *Shê-yang Ho* (see Route 26 B).

(D) Yencheng Ku to the Sea (25 miles, crow-fly; actual distance by water 61 miles)

By the Yang-k'ou Ho; the river is winding, but navigable at all times. Sea-going junks from Manchuria, Shantung, and Shanghai regularly sail up the river, from its mouth at **Hai-k'ou** to **Li-yang-k'ou,** a place about ¾ mile from the North Gate of **Yencheng Ku.** About a mile farther NW., near the village of Cha-k'ou, it is divided from the Ch'uan-ch'ang Ho by a lock (see Route 21 B, section 6, mile 139).

A straight road on S. of creek connects Yencheng Ku with Hai-k'ou.

miles	
0	**Li-yang-k'ou** (¾ mile N. of **YENCHENG KU,** P.).
8½	**Pei-yang,** ¾ mile on l.
11½	**Nan-yang,** on r.
49½	**Ju-i-kang,** on r.
55	Creek broadens out into an estuary.
56	**Hai-k'ou.** Sea about 5 miles farther E.

ROUTE 26

FOWNING TO THE GRAND CANAL AND TO THE SEA

Authorities: G. E. Pereira, 1908; War Office MS. maps of N. Kiangsu.

The Grand Canal can be reached either at Liu-cha (8 miles N. of Yangchow) or near Hwaianfu.

(A) Fowning to Liu-cha

General direction S. This route is via Yencheng Ku (see Route 21 B, section 6) and Taichow Ku (see Route 25 A).

Distances: by Route 24 A, about 148 miles; by Route 24 B, about 170 miles; by Route 24 C, 177 miles.

(B) Fowning to Hwaianfu (about 62½ miles)

General direction WSW. Distance by land estimated at 150 li, say 50 miles. The present route lies along the Shê-yang Ho, which leaves the Grand Canal near Hwaianfu. From April to August boats of 4 to 5 ft. draught are able to ascend from Fowning to Hwaianfu, but no details available. The river is said never to be closed by ice. The following itinerary is based on maps and is only tentative.

miles (approx.)	
0	**FOWNING,** P. (see *Gazetteer*). From the South Gate along the *Shê-yang Ho*, a winding river 150 to 200 yds. wide. Direction W.
2½	Creek winds S.
12½	**San-chi.**
16½	**Mêng-lung.** General direction W.
22½	**Tungkow,** P.
28	**Yen-lin.**
35½	**Tsê-kou.**
36	Creek enters *Ta-tsung* Lake and crosses N. end of it.
37	Route leaves the lake by a creek.

miles (approx.)	
41	Route joins creek from Yencheng Ku. For details beyond mile 41 see Route 25 B, mile 55½.
62½	**HWAIANFU,** P. T.

(C) Fowning to the Sea (about 76 miles ?)

Along the Shê-yang Ho. From April to August sea-going junks come up to Fowning, but for the rest of the year they are unable to do so.

miles (approx.)	
0	**FOWNING,** P. Direction E., then ENE. Creek winds considerably.
17	**Mu-chia-chiang,** about 1½ miles N.
24½	Sharp turn S. General direction now SE.
31	**Chêng-hsiang-chiang.**
63	**Hsiao-hai,** on l.
76	*Hai-shan-miao,* a temple. Creek opens into the sea.

ROUTE 27

FOWNING TO HAICHOW

Authorities : G. E. Pereira, February and March, 1908 ; Survey by G. E. Pereira and Dan Sing, 1908.

(A) Land Route (83¼ miles)

General direction NNW. The road averages in width from 3 to 6 ft., but is in places as broad as 12 and as narrow as 3 ft. Occasionally it degenerates into a mere footpath, practicable only for wheelbarrow traffic. It is nowhere metalled, and in many places, after heavy rain, it becomes almost impassable.

The country S. of Haichow is liable to flood between July and the end of September as far down as Shuyang.

The road throughout its length lies in a fertile, cultivated plain, dotted with villages.

The former bed of the *Yellow River*, now dry and under cultivation, forms a dividing line between the plains extending northward to Peking and the low-lying country, intersected by waterways, between it and the Yangtse.

In the northern section of the route, isolated hills, 300–500 ft. high, are to be seen, and 1 mile S. of Haichow is the Haichow Shan (800 ft. ?), a rocky eminence some three miles long.

Spring wheat forms the first crop, and is followed by beans, kaoliang, millet, and maize for the second. In the northern section, where the country is liable to flood, the only crop possible is spring wheat.

Houses in the villages are of mud, with thatched roofs, and, except in towns, are detached from one another.

Wheelbarrows form the chief means of transport. There are also a few pack-donkeys and many bullocks and water-buffaloes. A certain number of two-wheeled farm-carts are obtainable.

miles	
0	**FOWNING,** P. (see *Gazetteer*). Leaving the South Gate, route leads to the West Gate, about 700 yds. distant, and for ½ mile through west suburb. The latter is surrounded by a 20-ft. bank with a stream beyond, 12 ft. broad, which continues as a moat along the north side of the city. Small boats ply on it.
	Leaving gate of west suburb, route crosses this stream by a wooden bridge, and continues NW. across a fertile plain, at present under spring wheat, with many small villages. Heavy 6-ft. road, nearly impassable for wheelbarrows after one day's rain.
1½	Route follows l. bank of *Ch'uan-li Ho* (called locally Tso-lai Hoo), which flows SE. into the *Shê-yang Ho*. Banks 6 ft. high, fairly clear water. River 20 ft. wide, and 2 ft. deep for first 8¾ miles.
2¼	**San-yang-chuang** (20 scattered houses), on l. bank.
3½	Road becomes a narrow path along l. bank, some-

miles	
	times crossing small side streams by bridges, sometimes descending into and crossing them when nearly dry or when banked up.
4¼	**Tai-chia-chuang** (30 houses), 200 yds. to N.
5½	**Liu-chia-tsao** (40 houses), on r.
6½	Wooden bridge on two trestles across river.
7¼	**T'ang-ch'êng** (150 houses), on l. bank.
8¼	Eastern **Shih-chia-chuang** (80 houses), a mile to N. A shallow canal, 12 ft. wide, crosses at right angles.
8¾	**Wan-chia-tsui** (40 houses), on l. bank. River 1½ ft. deep.
9½	Western **Shih-chia-chuang** (80 houses), a mile to N.
10½	**Ta-shih-chuang** (120 scattered houses), ¼ mile to S.
13	**Hsi-chuang** on l. bank, and **Tung-chuang** on r., comprising together about 40 huts.
13½	**Ma-ch'i-ying** (20 houses).
13¾	Route crosses *Ch'uan-li Ho*, which turns NE., by a wooden trestle bridge. The outer embankment of the old *Yellow River*, curving for a short distance about a bend, is next crossed. It is about 20 ft. high, and 20 yds. wide at the top, with some huts. Sides cultivated.
	Route descends embankment to the W., and crosses marshy ground between outer and main south embankment, passing through **Ma-kung-t'ou** (50 houses), on another smaller embankment.
14½	Main south embankment of the old *Yellow River*. Top and sides cultivated. A rather heavy 6-ft. road runs along it. It is about 40 ft. high and 20 yds. wide. River-bed is partly cultivated, partly waste; with a channel of still water, 40 ft. wide, and shallow, near south embankment.
15¼	**Pai-sha** (called locally Bok-sa), about 400 houses. Western end of embankment, eastern end below it. There was, in 1908, a detachment of infantry (Hsün-

miles

fang Tui) from Tsingkiangpu. Direction NW. along heavy 6-ft. road on southern embankment for 1,200 yds. Then across bed of old *Yellow River*, about 1,200 yds. wide, and 20–30 ft. below embankment on either side, mostly under cultivation. Channel, 40 ft. wide, of still water, crossed by a low brushwood bridge.

17 Reach northern embankment, about 20–30 ft. high. An outer, circular embankment, about 20 ft. high, ½ mile distant to NW.

17½ Outer embankment joins northern, and is now 40 ft. high. Below it on north side is **Tien-hu-chên** (about 500 houses).

18¼ Route descends embankment at east end of Tien-hu-chên, and proceeds NW. across a fertile plain covered with villages. Good 10-ft. to 20-ft. road with tracks of farm-carts which in this district are drawn by four bullocks. Wheelbarrows plentiful.

20¼ **Lung-pei** (100 scattered houses).

21¾ Cart-road narrows to 4 ft.

22½ **Ma-chia-chuang** (30 houses) and **Hsü-chia-chuang** (35 houses).

23¼ **Chin-chia-wu-chi** (called locally Chin-chia-ok-chi) (33 houses). Farm-cart road 8 to 10 ft. wide.

24¼ Across fields, surrounded by houses and villages.

25½ **Yeh-kuan-chuang** (5 houses). Country partly grass, partly under cultivation.

26½ **Yu-nan-chuang** (5 houses). Road crosses a small wooden bridge over a nearly dry small canal leading to

28¾ **Pai-lu-kou** (called locally Bore-loo-gur), about 500 houses.

Route continues W. across a fertile plain, with patches of grass in places; many small villages; houses of mud, and detached from each other. Fair 6-ft. farm-cart road, varying in width from 4 to 10 ft., liable to become heavy after rain. It is much used by wheelbarrows.

miles

30¼ **Ts'ai-chia-chuang** (5 houses).

31¾ Road crosses the *Yi-fan Ho* at **Wang-tu-k'ou**. It is a canal, 20 yds. wide, flowing N. It is crossed at a dam by a low footbridge of planks over channel 12 ft. wide and 2 ft. deep. It is practicable for small boats only when the river is high.

Ch'êng-tzŭ-t'ou (50 houses).

33½ Road crosses nearly dry channel. **Yang-chia-chuang,** with **Hu-chia-chuang** to SW., form a village of 20 houses.

34¼ **Shih-chia-ta-chuang** (25 houses).

36¼ *Pai-yang-ssŭ* (small temple) 500 yds. to south of road.

36¾ *Yen Ho* (No. 1) embankment, visible 2 or 3 miles to SW.

37½ **Fêng-chia-chuang** (25 houses).

40¾ **Sinanchen Ku,** P., 800 to 1,000 houses on r. bank of the *Yen Ho* (No. 1). Some war-junks and a post of soldiers for guarding the salt. The south end of the town is ½ to ¾ mile E. of the Yen Ho (No. 1), and the N. 600–800 yds. distant. Yen Ho (No. 1) here 40 yds. wide.

Leaving south end of town, route continues NNW. across fertile plain, dotted with many small villages. Good 12-ft. road, in parts raised to 2–4 ft. above fields, in parts on level. *Ta-yi Shan*, 20 miles to NNW., visible. Much donkey traffic, and a fair number of wheelbarrows.

43¼ **Hsiao-chou-chia-chuang** (40 houses), 600 yds. to W., on r. bank of Yen Ho (No. 1). Belt of fields, two to three miles wide, between villages on l. and those to W. Telegraph near road.

43½ **Ta-chou-chia-chuang** (60 houses), on r. Road, 8–12 ft. wide, turns NW.

44¾ **Wu-chang-ho** (50 houses), on r. bank of *Yen Ho* (No. 1). To north of it the *Wu-chang Ho* flows E.

miles

from the Yen Ho (No. 1) to the sea. It is dammed by an earth barrier 143 yds. long, 6 ft. high, and 3 or 4 ft. wide. Telegraph crosses to the l. bank of Yen Ho (No. 1). Uneven path 3 to 6 ft. wide along r. bank, sometimes at a distance of 50 yds.

45 **Ta-hsin-chuang,** some 300–400 disconnected houses, extending for a couple of miles along both banks of the Yen Ho (No. 1).

46¾ Path 3 to 12 ft. wide. Sides ploughed up in places.

48¼ **Lung-kou** (60 houses), on r. bank of Yen Ho (No. 1). North of it the *Ch'ao Ho* branches off. It has a dam 125 yds. long, 4 ft. high, across it, and is almost dry. On the other side, the *Liang-mi Ho* comes in from the W.

49¼ *Yi-chou Ho*, flowing E. It is 40 yds. wide, extremely shallow, and dammed at entrance. **Hsiang-chia-wan-tzŭ** (70 houses), 300 yds. beyond. Path again along r. bank of Yen Ho (No. 1), passing **Yi-chou-ho,** 150 scattered houses.

50½ **Chang-chia-tien,** a village of 120 houses, chiefly on r. bank of *Yen Ho* (No. 1).

Chenkiatsih, P., is 15 li to E., T'ang-kou 30 li to W., Wang-chia-chi 18 li to NE., and T'ieh-liu-chên 15 li to W.

Route continues across fertile plain, along uneven towpath, 3–6 ft. wide, on r. bank of Yen Ho (No. 1).

52½ **Ta-wu-chuang** (100 houses), 300 yds. from r. *Han Ho*, 20 yds. wide, comes in on l. from W.

53¾ **Yang-chia-chi** (40 houses), on both banks.

54¼ **Ta-fêng-chuang** (20 houses), on l.

54¾ Towpath now 8–12 ft. wide, and in parts in better condition.

55¾ *Ha-ma Ho*, 40 yds. wide, comes in on l.

56 **Tso-chia-yao** (50 houses), on l.

58 Two dams on r. blocking entrances to *Liu-li Ho*, 96 and 77 yds. long respectively. Not much water

miles

in channels, the northern of which goes to Kuang-ho-k'ou on sea, 150 li distant by river.

59 Cross to l. bank of *Yen Ho* (No. 1) at south end of Tayishan.

59¾ **Tayishan,** P. T., on l.; 1,400 houses. Many shops and some inns. The route through it crosses several bridges over channels, various mouths of the *Wai Ho*, which flows from the SW. The main channel flows W. and N. of the town into the Yen Ho (No. 1) and is crossed by two bridges. There is a small group of hills ¾ mile to NW. of town, called the *Ta-yi Shan*, 300–500 ft. high.

The road from Antung Ku, via T'ang-kou, to Haichow, passes to the west of the town.

Direction of route NNW., leaving the Yen Ho (No. 1) on the r.

60¼ Bridge of loose stones over main channel of the *Wai Ho*, which flows NE.

60½ Junction with road from Antung Ku and T'ang-kou, 6–10 ft. wide, and of uneven surface. Route crosses a pass in the *Ta-yi Shan*, 50 ft. high, with *Nai-nai-t'ing* (temple) on 300-ft. summit on r., and pagoda on *Kuan-yin Shan* (200 ft.) on l. Telegraph along road. Some higher summits of about 500 ft., part of Ta-yi Shan, are passed on the l.

60¾ Road to Panpu, P. T., with telegraph, goes N.

61½ **Jên-t'ou-chuang** (50 houses). Road still skirts Ta-yi Shan on l.

61¾ Route branches off NNW. from road going NW. at foot of Ta-yi Shan, across fertile plain. Sandy 6-ft. path. Hills some 20 miles distant to N. and NE.

63¼ Route leads over 6-ft. embankment and crosses the *Hsing-hsing Ho*, by ferry, 50 yds. wide, clear water, 10 ft. deep, flowing NE. **Jên-chia-chuang** (40 houses), ¾ mile to E. Direction NW. across plain, with line of small villages in distance.

miles

65¼ **Chang-chia-wan** (20 houses), on r., several small villages on l. *Hsiao-yi Shan*, a rock 100 ft. high, 2¼ miles to NNE.

66½ **Pei-chang-chia-wan** (30 houses).

67½ The *Ting-tang Ho*, with a 10-ft. embankment, is crossed by a dam of earth, 27 yds. long by 2 ft. wide on top. River 3 ft. at deepest. **Wei-k'ou-tzŭ** on north bank. Direction NNW., along embankment of Ting-tang Ho, which latter after ½ mile bends to r., whilst embankment, 4–6 ft. high, continues.

68½ Road turns inwards to embankment, and continues alongside of it.

69¼ **Hsin-ho-k'ou-tzŭ** (10 houses).

70 Embankment turns off to r.

70½ **T'ang-chia-ch'iao** (15 houses), on l. Road leads across plain, passing a few small villages on l.

73¼ **Hsin-pa-chên** (370 houses). There are two squads (about 20 men) of soldiers belonging to one of three camps, whose duty it is to guard the salt. Direction N. across plain, along 8–12 ft. uneven path, much used by wheelbarrows. Country under spring wheat, which is the only crop, as the plain is liable to floods from July to the end of September. Small villages dotted about, away from the road.

77¾ **Yüan-chia-chuang** (10 houses), 100 yds. to l.

Road from Tsingkiangpu joins in on l. (see Route 28 B, mile 10¼).

81¼ **Liu-chia-chuang** (30 houses), on r., at foot of the *Haichow Shan*, a rocky ridge with some stone quarries at western end. Hill nearly 3 miles long, stretching SE., rising abruptly from the plain. NE. peak called K'ung-wang Shan. Soil sandy. Stony 6–10 ft. road, in bad condition, passing Haichow Shan on the r. The *Ch'iang-wei Ho* (or Haichow Ho), 50 yds. wide, said to be 14 or 15 ft. deep, comes in from W., 200 yds. to l., and then bends N.

miles	
	It flows from Shuyang, some 50 miles distant.
82¼	**Pa-kou-chuang** (20 houses). A small stream here cuts across road. Direction E., away from Haichow Shan. Plain extends to N. and W.
83	*Pai-hu Shan*, a rock 140 ft. high, 200 yds. on r. Road passes through a mud embankment, 12 ft. high, and then through small W. suburb.
83¼	**HAICHOW,** P. T., West Gate (see *Gazetteer*).

(B) Alternative Land and Water Route (about 81½ miles)

Identical with Route A as far as Sinanchen Ku, mile 40¾; from there by water along the Yen Ho (No. 1) (for details see Route 28 A).

ROUTE 28

HAICHOW TO TSINGKIANGPU

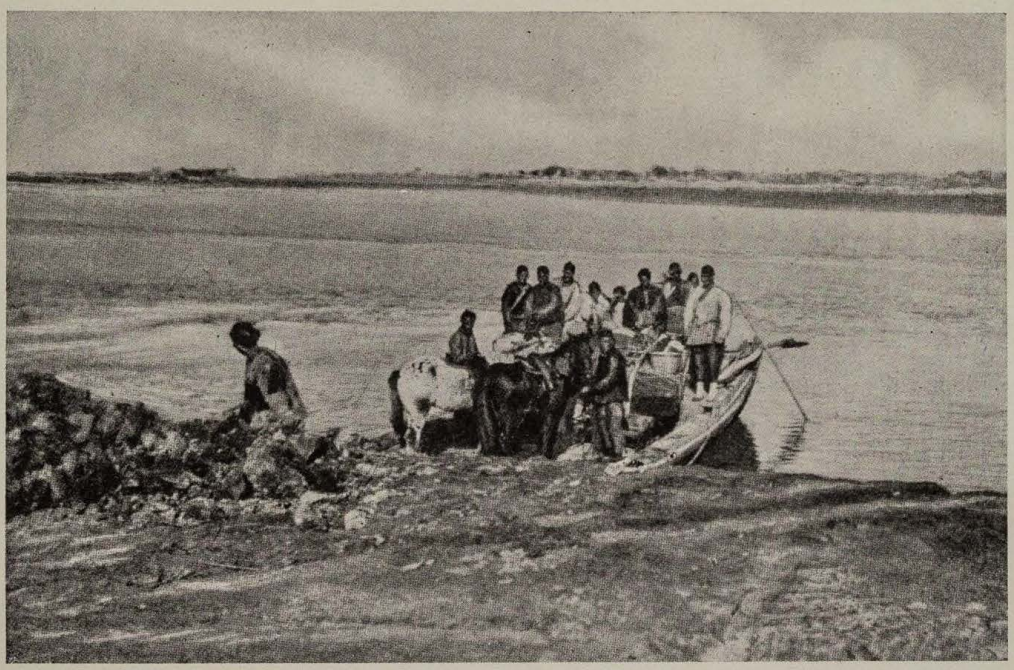
Authorities: Route (A): H. R. Davies, March, 1908, and J. Schulze, 1911.
Routes (B) and (C): A. H. Hilton-Johnson, March, 1908.
Route (D): A. H. Hilton-Johnson, March, 1908, and Ismail Khan, March, 1908.

General direction S. There are several alternative routes.

(A) Water Route (95½ miles)

The route starts from Sinpuchen, the port of Haichow, and lies along the canal called the *Yen Ho* (No. 1)[1] or *Salt Canal* (i. e. the canal by which salt is carried). The Yen Ho is not tidal and has no current. It is cut off from the Haichow Ho (the tidal river by which sea-going junks reach Sinpuchen) by an earthen dam 15 ft. thick. Several rivers cross it from

[1] This creek is called *Yen Ho* (No. 1) to distinguish it from other rivers bearing the same name, especially the *Yen Ho* (No. 2), described in Route 24 B.



FERRYING THE HAICHOW HO: NORTH KIANGSU

W. to E., but the eastern bank is invariably raised artificially to conserve the water and to prevent an influx of the tide. There is, therefore, no connexion with the channels to the E., the water in which is purely tidal, except when the banks are opened to let off the surplus, when the Yen Ho becomes too full.

The width of the Yen Ho varies from 30 to 60 yds. It is generally navigable at the lowest season (February and March) for boats drawing 2½ to 3 ft. In summer there is sufficient water for boats of 4 to 5 ft. draught. At the season of the year when the water is lowest, the minimum depth is 2½ ft. In its northern part, roughly as far as Tayishan, at mile 23½, it is liable to be closed by ice in winter for from one to three months, usually about December, January, and February. The more southern reaches are not so liable to freeze, but may occasionally be closed for a few days at a time.

The only bridges existing are in the extreme N. of the route. There are two wooden ones at Sinpuchen, and others are found at nearly every village between here and Panpu, the centre part of which consists of a boat which can be moved to permit of passage through. Ferries are numerous, and are to be found at practically every village.

The boats used on the Yen Ho are of two sorts, Yen-ch'uan or salt-boats, varying in size from 200 to 1,000 piculs (12 to 60 tons); and the Hei-k'ua-tzŭ or passenger-boats, a sort of house-boat 35 ft. long by 10 ft. wide, with sleeping accommodation for about eight men besides the crew of three. The salt-boats are the more suitable for carrying stores and guns. Boats sail when possible, otherwise they are towed.

The country is open and quite flat, except for occasional hills which rise out of the plain in the more northerly part. The *Haichow Shan* near Haichow, and the *Ta-yi Shan* (mile 23½) are the only ones near the route. S. of the Ta-yi Shan there are no hills.

There is always a path leading along one bank or the other, usually along both, passable for mules or wheelbarrows,

though not much used by them, there being no main road following the Yen Ho. Unbridged side-creeks are rare, so that there is little to impede progress along the banks.

Carts are used for farm purposes, but there are no regular cart-roads in this part of the country. Pack-donkeys and mules are used, and the country is suitable for cavalry, though their movement would sometimes be obstructed by rivers and canals, and grass is scarce in winter.

Fair supplies of flour, wheat, millet, and vegetables are obtainable at Panpu (12¼ miles) and Tayishan (23½ miles), and plenty of all sorts at Tsingkiangpu. At Sinpuchen the flour-mill grinds 100,000 lb. of flour every day, and keeps four months' supply of wheat in stock.

Water is obtained from the Yen Ho, except in the vicinity of Sinpuchen, where it is brackish and has to be brought from Panpu or from the *Yün-t'ai Shan.*

miles	
0	**Sinpuchen,** P. (Port of **HAICHOW,** P. T.; see *Gazetteer*). From a wooden bridge on stone piers near the dam which closes the *Yen Ho* near the west end of the Sinpuchen the route leads through the village of Sinpuchen, and then turns S. The canal is here 30–40 yds. wide. A wooden bridge, capable of being lifted to allow passage of boats, is passed in the village. The bean-oil mill and flour-mill, two large enclosures with tall chimneys, are passed on the l. in Sinpuchen.
2¾	**Hsin-ho-t'ou** (5 houses), on r., and bridge with movable boat in middle. From here a creek navigable for boats of 1 ft. draught branches off to the NE. corner of Haichow city, 2 miles distant. Boats of 2 ft. draught can ascend in rainy season. There is also a good road from here to the city (see Route 29).
3¼	*K'ung-wang Shan*, a hill 150–200 ft. high, on r., a lower spur of *Haichow Shan*, a rocky ridge rising abruptly from the plain.

miles

4 **Ch'iu-shan-chuang,** a village of 15 houses on both banks, and bridge with movable boat in centre.

Branch road to Haichow, 3 miles distant.

6¼ **Pien-p'u** (10 houses), on both banks. Bridge.

7¼ **Pien-yü** (or Pien-wei) (6 houses), on l.

9½ **San-ch'a-tzŭ** (15 houses), on both banks.

11¼ **K'o-t'ou-ch'iao** (20 houses), on both banks. Bridge formed of earth bank and one movable boat.

12¼ **PANPU,** P. T., a market town of 1,000 houses. Residence of a Chang-ta-shih, superintendent of salt traffic. Main part of town ½ mile to l., on a navigable canal.

It leaves the route here in two branches, which afterwards unite in the town, forming a channel and continuing 6 or 7 miles farther to Nan-ch'êng.

The canal now increases to 60 yds. in width.

15 A creek to the l., said to be navigable only to Chunghing, P. T., 20 li (6½ miles) distant.

15¾ A creek to the l., said to lead to Shih-tui (60 li), where an embankment or lock stops navigation.

Village of **Ta-ch'ai-shih** (25 houses), on l.

17 Creek to r., navigable to the hill *Hsiao-yi Shan*, used for porterage of stone.

18¼ **Êrh-shih-li-tun** (8 houses), on l. ; 3 ft. of water.

19½ **Hsiao-ch'ai-shih** (25 houses), on both banks.

Creek to l. (cut off from canal by an embankment) said to lead into the *Liu-li Ho* (see mile 25¾). Creek to r., said only to be navigable for very small boats owing to a low stone bridge.

21¾ Navigable creek to r., said to lead into the *Ting-tang Ho*, 12 or 15 li distant, a navigable river running southwards.

23½ **TAYISHAN,** P. T., market town of 1,400 houses on both banks. Beans and wheat collected here for shipment to Sinpuchen. *Ta-yi Shan* (about 500 ft.) on right.

miles

The road connecting Tayishan with Haichow has been described in Route 27 A, mile 59¾ onward.

25¾ **Liu-li-ho** (8 houses).

Tidal navigable creek to the sea on the left. Like all creeks from the canal to the sea it is cut off from the former by a mud-bank.

27¼ Creek from r., navigable in summer; said to join that from Lung-kou to Shuyang.

29¼ **Yang-chia-chi** (40 houses), on both banks, and ferry.

32¼ **Chang-chia-tien,** market village of 120 houses on both banks, with ferry.

33¾ Navigable tidal creek, called *Yi-chou Ho* (or Yi-chai Ho), to l., joining the *Lung-kou Ho* lower down.

34¾ **Lung-kou** (60 houses), on both banks.

Tidal navigable creek to l., cut off from the canal by a bank, joining the *Wu-chang Ho* at T'ou-tu-k'ou, 30 li distant.

Creek to r. 100 yds. wide at mouth, navigable for boats of 2 ft. draught to T'ang-kou (30 li) always; to Shuyang (120 li) in summer; and to Sutsien (240 li) if water is very high.

36¾ **Ta-hsin-chuang,** scattered village along both banks.

37¾ **Wu-chang-ho** (20 houses), on l.

Tidal creek navigable at high tide for boats of 3 ft. draught to l., through Siangshuikow, P. (45 li), Hai-an-chên, (95 li), and Yin-wei-kang (120 li), to the sea (130 li).

Creek to r., navigable for boats of 2½ ft. draught to Kao-chia-kou (40 li) and Wang-chia-ma-t'ou (70 li) in winter. In summer boats of this draught can go to Liu-lao-chien (190 li), where the creek reaches the Grand Canal, but is cut off from it by a mud embankment (see Route 19, sect. 2, mile 51½).

40¾ **Sinanchen Ku,** P., market town of 800 to 1,000 houses, ¼ mile distant on l. Some houses also on bank of canal.

miles

A road to the S. leads to Powning: see Route 27 A, mile 40¾.

43¾ **Yüan-cha** (15 houses), on both banks, with ferry.

45 **Ying-wei-tzŭ** (25 houses), on l.

46½ **Hsiao-chin** (12 houses), on both banks, with ferry.

47¾ **Sun-chia-wan** (15 houses), on l.

50 **P'ing-an-ho** (8 houses), on r., with ferry.

55½ **P'an-chuang** (12 houses), on both banks, with ferry.

57 **Hsing-kung** (18 houses), on both banks, with ferry.

58½ **Fêng-chia-ma-t'ou** (10 houses), on both banks, with ferry.

60½ **Ssŭ-chia-ma-t'ou,** village of 60 houses and two or three small shops, on both banks, and ferry; 3½ ft. of water.

63 **Yi-ma-t'ou** (16 houses), on l.

64½ **Hsüeh-chia-hang** (20 houses), on both banks, with ferry; 3 ft. of water.

65½ **Kao-t'ai-tzŭ** (15 houses), on r.; 2½ ft. of water.

66½ **Yen-chia-ma-t'ou,** village of 35 houses, on both banks, and some small shops for selling food to boatmen. The canal here is closed by an earth embankment 30 ft. wide at the top, used to regulate the depth of water between it and Tsingkiangpu. It is built every year about October, and kept standing till about May, when, the part of the canal south of it being as a rule full, it is opened to let water out. Boats cannot at any time pass this embankment without being dragged over by ropes; so that cargo and passengers are usually transhipped. Depth of water, 3 ft.

67¾ **Ts'ai-shih** (10 houses), on both banks, with ferry.

69 **Chou-chia-wan** (24 houses), on r.

70¼ **T'ao-chia-ma-t'ou** (15 houses), on r.

72 **Chang-chia-ma-t'ou** (15 houses), on l.

Antung Ku, P., lies 2 miles away on l., the city pagoda being visible. From here onward the canal is somewhat shallower.

miles

73 **Ta-kuan** (12 houses), on both banks.

73¾ Creek from l., 8 yds. wide, crossed by footbridge ¼ mile from its mouth.

74 **Wang-chuang** (24 houses), on r. A road leaves E. to Antung Ku.

75 **Shui-chia-tu** (6 houses), on l., with ferry.

76¼ **Chang-chia-tu** (15 houses), on r., with ferry.

78¼ **Wang-chia-tu** (40 houses), on both banks, with ferry.

Creek runs in from r., 10 yds. wide, not bridged near mouth. Not used by boats.

80¾ **Li-chia-tu** (20 houses), on both banks, with ferry.

82 **Hsüeh-chia-tu** (15 houses), on both banks, with ferry.

83 **Kuo-chia-tu** (18 houses), on both banks, with ferry.

84½ **Chang-kê-chuang** (25 houses), on r.

86 **Chang-chuang** (25 houses), on both banks.

87 **Hsia-pa** (15 houses), on l.

90½ **Liu-tu-k'ou** (15 houses), on both banks, with ferry.

92¾ **Wangying,** P., walled village of 400 houses, ¼ mile distant on l., partly extending to the canal. This is the port for Tsingkiangpu where passenger-boats stop.

The salt-boats usually go on another mile to **Sipa,** P. RS. (100 houses). The *Yen Ho* joins the *Grand Canal* at Shuang-chin-cha some 9 miles W. of Tsingkiangpu, but a dam prevents boats from passing from one to the other—see Route 19, sect. 2, mile 16. A railway and a good modern road connect Sipa with Tsingkiangpu. Goods are conveyed to the junks on the Grand Canal by three-wheeled carts drawn by oxen.

From Wangying there is a road, much used by wheelbarrows and passable for carts, to Tsingkiangpu. It passes through Wangying, and just beyond, crosses the former bed of the *Yellow River* ½ mile wide, with a stream running down it at the near side (200 yds.



THE YEN HO (NO. 1), BETWEEN TSINGKIANGPU AND HAICHOW

miles

wide, 12 ft. deep), crossed by a footbridge. The high embankments of the Yellow River are still standing.

95½ **TSINGKIANGPU,** P. T. RS. (see *Gazetteer*). Road approaches the town through a plain, leaves the barracks of 3,000 of the *Lu Chün* on the r., enters at the North Gate in the mud wall, and ends at the stone lock bridge over the *Grand Canal* outside the East Gate and just above the launch wharf.

(B) Land Route via T'ang-kou (79½ miles)

This is the main and most direct route between the two places. In its normal state and under all ordinary conditions of weather the route is passable for all arms and all forms of transport. It is always at its best in winter. Occasionally it is rendered entirely impassable (especially in the first and second stages) by heavy rain in summer. The road described in this report is that by which infantry would march. In a few cases it would be necessary for wheeled vehicles to make slight detours and follow the regular cart-track. The roadway throughout is an unfenced cart-track with an average width of about 15 ft. It is, generally speaking, straight and level, and has no appreciable gradient anywhere. For about the last 35 miles it is a made road, drained at the sides, and with a high camber. Except for the first two miles beyond Haichow, where it is very rough and strewn with loose stones, its surface throughout is of hard, beaten mud, free from stones and in good condition, practicable for all arms and transport in dry weather. Infantry could usually march in fours, and almost the whole length of the road is practicable for bicycles. In wet weather, however, the surface becomes bad, and locomotion almost impossible.

The country is flat or slightly undulating, well cultivated, and very open up to mile 40, after which it is fairly well wooded. There are but few waterways, which in winter seldom offer any obstacle, but in summer are 15 ft. or more

deep, and can only be crossed at ferries on the main routes of travel. Cart-roads and footpaths intersect the country in all directions, which in dry weather is passable practically anywhere by any arm. Market towns and villages are few. The houses are built either of mud-plastered reed wattle or brickwork, or of solid mud, and have almost invariably thatched roofs. Within 2 miles of Haichow, however, the houses are similar to those of eastern Shantung, and are substantially built of rubble stone quarried from the Haichow Shan hills. All along the route the houses would afford sufficiently good temporary accommodation for European troops.

Nearly all market towns and some villages are walled, i. e. surrounded by a mud-bank from 10 to 20 ft. high.

There are no defiles but, owing to the bare and open character of the country, any of the walled market towns *en route* would form a strong defensive position and present a serious obstacle if held by an enemy.

All streams are crossed by fording in the winter and by ferry in the summer.

In dry weather suitable camping-grounds for a force of any size are to be found by the road anywhere.

Supplies of food and forage would be obtainable in fair quantities in market towns, especially in Tsienkiatsi and Wu-chi ; also to a much larger extent in Shuyang and Haichow. Water is plentiful from the streams and wells, but is hard, bitter, and of poor quality.

Transport consists chiefly of wheelbarrows, and fair numbers are always available along the route. Carts are obtainable in Tsingkiangpu, but N. of that place none can be counted upon, as no agencies exist either in Shuyang or in any of the market towns; nor are they privately used by the people. There is no form of pack transport, though donkeys are used to some extent for riding and for carrying grain sacks and other soft articles on the bare back, without pack saddlery or other harness of any description.

This road should not be attempted without guides.

miles	
0	**Sinpuchen,** P. (port of **Haichow**). Raised road 12 ft. to 18 ft. wide, through level cultivated plain.
3½	**HAICHOW,** P. T. *North Gate.* General direction SW. through the city.
4¾	*West Gate,* through which road leaves the city. General direction SSW. Road rough and strewn with loose stones passes along the western slope of an extensive hill rising abruptly from the plain and known as the *Haichow Shan* (called K'ung-wang Shan on Engl. map of Shantung—in reality the name of NE. peak of Haichow Shan—other names for it are Ching-p'ing Shan and Ch'ü-yang Shan).
6¾	**Liu-chia-chuang,** village (70 houses) at foot of the hill.
	Road again improves.
10¼	**Yüan-chia-chuang** (10 houses). Road to Fowning branches off on l. (see Route 27 A, mile 77¾).
12	**Ch'ü-chuang** (20 houses).
14	**Mo-chuang,** village (30 houses).
15½	**Mo-chia-k'ou-tzŭ** (20 houses).
16¾	**Shên-chia-kang** (40 houses).
17¾	**Lung-chü,** walled market town of 150 houses. Road enters N. end of town.
23	**Ch'i-hsing-chuang** (40 houses).
23¾	**Ts'ao-chuang** (50 houses).
24½	**Chang-chuang,** village (80 houses).
26	**Tung-wei** (30 houses).
27½	**Kêng-chuang** (70 houses).
29	**Liu-shu-chuang** (40 houses).
29½	**Yung-chuang** (30 houses).
32½	**Wu-chi,** walled market town of 500 houses. Route enters N. end. General direction SSW. The route goes through very open country and passes the following small villages: **Hsiao-fan-chuang, Chou-chia-chuang** (50 houses), and **Liu-chia-chuang** (for alternative route see below, Route 28 C).

miles

37 **Ch'ü-chia-miao,** small walled village. Just S. of it the stream known as the *Ch'ai-mi Ho* (or Shang Ho) is crossed by a ferry-boat or ford, the winter depth being not less than 3 ft.

38¼ **Chang-chia-wei,** village (50 houses).

38½ Route crosses a small stream called the *Yang Ho* on a winter causeway.

40¼ **Huang-chia-yüan,** scattered village.

41 **Ma-ch'ang,** a walled market town (300 houses), entered at N. end. The road practically follows the bank of a small river known as the *Ma-ch'ang Ho,* 30 yds. wide, and too shallow for winter navigation, via

42¼ **Shên-chia-wan,** scattered village.

42¾ **Wu-li-ch'iao,** village. Mud causeway across river.

44 **Fan-chia-wan,** village.

46¼ **Yi-chia-wan,** village.

47 **Ch'ên-chia-kuo,** village.

47¾ **Wang-chia-chuang,** village.

48¼ **T'ang-kou,** walled market town (200 houses).

50½ **Mu-chia-chuang,** small village.

51¼ **Chao-chia-chuang,** small village.

52½ **T'ao-yüan-chuang,** small village.

53 **Ta-hsing-chuang,** small village.

55 **TSIENKIATSI** (Ch'ien-chia-chi), P., walled market town (1,000 houses). Route enters at E. end.

Alternative Route C joins main route here.

A small stream known as the *Ch'ien-lu-t'ang Ho* is crossed immediately south of the town.

56 **Ho-k'ou-chuang** (50 houses).

58½ **Yang-chia-chuang** (20 houses).

59½ **Hsü-chia-liu,** walled market town (200 houses). The same stream is crossed again, in winter by a temporary causeway, and in summer by a ferry.

62 **Chin-ts'un** (30 houses).

64½ **Chien-ch'iao-chên,** walled market town (100 houses).

miles	
67	**Wu-li-chuang,** walled market town (300 houses). Route enters N. end. Beyond the town road lies through open country, very low and wet in parts, passing several small villages.
70¾	**Ting-chia-chi** town (200 houses).
77	Route reaches l. bank of the *Yen Ho* (No. 1). The latter, here 30 yds. wide and 8 ft. deep in winter, is crossed by ferry-boat.
77½	**Wangying,** P., walled market town (400 houses). Road crosses the old bed of the *Yellow River*. For details see Route 28 A, mile 92¾.
79½	**TSINGKIANGPU,** P. T. RS. (see *Gazetteer*). Road enters at the North Gate in the mud wall, and ends at the stone lock bridge over the *Grand Canal* outside the East Gate.

(C) Land Route via Shuyang (91 miles)

Alternative route for the section between **Wu-chi** and **Tsienkiatsi.** The road is 11½ miles longer and the surface not so good. Between Wu-chi and Shuyang it becomes more of a field track. From mile 49 to mile 53 it is raised on a bank 10 to 20 ft. high. The only bridge of importance is that immediately N. of Shih-tzŭ-ch'iao at mile 53.

miles	
0	**Sinpuchen,** P. (port of **Haichow**). For details up to mile 32½ see Route 28 B.
32½	**Wu-chi.** General direction WSW.
34	**Chou-chia-tao-k'ou,** hamlet of a few houses. Here the road crosses the *Ch'iang-wei Ho* (or Haichow Ho), which flows N. to Haichow (see Route D, mile 40).
35½	**Hung-kou** (70 houses).
37	**Shih-ho-chuang,** village of 30 houses.

miles

38 **Ma-t'êng,** walled market town of 200 houses, ½ mile distant on l.

42½ **Kuan-t'ien-chi,** walled market town of 500 houses.

45½ **Jên-chuang** (50 houses).

48½ **Shuyang,** P. T., an unimportant district city (3,000 houses) with a suburb extending for a mile outside the East Gate, through the eastern end of which the road passes.

Beyond the city road lies on a raised bank closely following the *Shang Ho* (also called Ch'ai-mi Ho) and keeping it on the r.

For navigation on this river see Route 28 D.

49 **Liu-shu-t'ou** (60 houses).

51½ **Shih-li-kou** (50 houses).

53¼ **Shih-tzŭ-ch'iao,** a market town of 100 houses. Before reaching it, the river, 50 yds. wide, is crossed by a high wooden-pile bridge with a 9-ft. roadway. General direction SSE.

53¾ Route crosses the *Hsin Ho,* a stream some 20 yds. wide and 1 ft. deep in winter, by a mud causeway. In summer this river is 60 yds. wide and 15 ft. deep, and is then crossed by ferry. **Ch'ien-chuang,** a hamlet on the r.

54¾ Route crosses tributary of Hsin Ho by a bridge.

55½ **Kuan-yin-kê** (40 houses).

57¼ **Hua-ying-fang** (40 houses).

60½ **Hu-chia-chi,** walled market town of 200 houses (?).

61½ **Liang-chuang** (30 houses).

63½ **Ho-hsi-chuang,** village of 50 houses on l.

64¾ **Tsou-chia-wei-tzŭ,** walled market town of 100 houses on r.

66½ **TSIENKIATSI,** P.

Alternative route rejoins main route (see Route 28B, mile 55).

91 **TSINGKIANGPU,** P. T. RS.

(D) Water and Land Route via Shih-tzŭ-ch'iao (97 miles)

As far as Shih-tzŭ-ch'iao this is the main and most direct water route between **Sinpuchen** and **Shuyang,** and lies via Kao-hsü by the *Ch'iang-wei Ho* (or Haichow Ho) to T'ang-chien, and thence by the *Ch'ai-mi Ho* (also called Shang Ho). The main road from Sinpuchen to Shuyang (see Route 28 C) lies within 5 miles of the river all the way, crossing it by a mud causeway or ford in winter, and by ferry in summer at a point a few miles SW. of Wu-chi at the hamlet Chou-chia-tao-k'ou, 40 miles above Sinpuchen.

Beyond Shih-tzŭ-ch'iao land route alone available (see Route 28 C).

River is tidal for some distance above Haichow, and has a sluggish current flowing N. At Sinpuchen the width of the river is 200 yds., but above this it narrows rapidly, and the permanent width between banks averages about 50 yds.

Present width of waterway is 25 yds. at Haichow, narrowing gradually to 10 yds. at Shan-chia-tang, $22\frac{3}{4}$ miles from Sinpuchen. S. of this it is dry in places as far as T'ang-chien, $44\frac{1}{2}$ miles distant from Sinpuchen. W. of T'ang-chien it averages about 25 yds. in width.

Present depth ranges from 10 ft. at Sinpuchen and 4 ft. at Haichow to under 1 ft. at Shan-chia-tang; thence to T'ang-chien it is seldom more than a few inches, and W. of it usually under 3 ft. In summer these depths may be increased by 10 ft. or more.

The high wooden-pile bridge at Shih-tzŭ-ch'iao, giving 16 ft. of waterway and 9 ft. roadway, is the only one met with.

The river is not navigated by launches. Native boats up to 6 ft. draught can reach Shuyang in summer, but in winter Shan-chia-tang, $22\frac{3}{4}$ miles from Sinpuchen, is the limit to which even small boats can ascend. In winter also, boats of under 2 ft. draught can ply between T'ang-chien and Shuyang, and small craft are said to be able to reach Sinpuchen from

T'ang-chien by going eastwards via the *Ch'ai-mi Ho* for some 24 miles, and then N. by the *Yen Ho* (No. 1) or Salt Canal.

The country is very flat, mostly under wheat cultivation, sparsely wooded, dry in winter, and then easily passable by all arms, but often swampy in summer.

To T'ang-chien the banks are mostly on a level with the surrounding country, beyond that they are raised 3–15 ft.

There are good camping-grounds in dry weather for a large force anywhere.

There is a good wheelbarrow path (not practicable for carts) on or close to the E. bank throughout.

Towing is always possible.

Small supplies only of food, forage, and fuel would be obtainable elsewhere than at Sinpuchen, Haichow, and Shuyang.

The river water is hard, bitter, and of poor drinking quality.

miles	
0	**Sinpuchen,** P. (port of **Haichow**). River follows a very winding course.
3	**Fu-an-t'an,** village (100 houses), on r.
6	**HAICHOW,** P. T. (see *Gazetteer*). Route passes the NW. corner of city, and thence SSW.
8	**Sha-pan-ch'iao** (30 houses), on r.
11	**Hsüeh-chia-fang** (40 houses), on l.
13½	**Chang-chuang,** village (120 houses).
15	**T'ang-chuang** (40 houses).
16	**Ta-fu-t'ing,** village (60 houses), on l.
17½	**Ch'ing-shui-wang** (30 houses), on r.
20¼	**Shang-fang,** market town on l. (100 houses).
21¼	**Hsü-chuang** (40 houses), on l.
22¾	**Shan-chia-tang,** village on both banks (130 houses). The limit of winter navigation for all craft. Above this the river is often dry in winter.
24¼	**Ma-shêng-kou** (80 houses).
26¾	**Kao-hsü,** a walled market town on both banks (80 houses).

miles	
27¾	**Shui-liu-chuang** (30 houses), on r.
28¾	**Lu-k'ou** (40 houses), on l.
30½	**Fan-chia-wan,** village on both banks (60 houses).
35	**Ho-chuang** (60 houses), on l.
36¼	**San-ch'a,** village on l. (40 houses).
	From here a stream flows W. to Shuyang. It is said to be rather longer than the present route, and is not navigable in winter.
40	**Chou-chia-tao-k'ou,** hamlet of a few houses on l.
	Here the main road from Haichow to Shuyang crosses the river (see Route 28 C, mile 34).
42¾	**Ou-ch'ih-chuang,** village on both banks (40 houses)
44½	**T'ang-chien,** market town, mostly on r. (120 houses).
	From here the *Ch'ai-mi Ho* (or Shang Ho) goes E. It is said to be navigable in winter for small boats to the *Yen Ho* (No. 1), and so to Sinpuchen. The *Ma-ch'ang Ho* runs SE. to Ma-ch'ang and is not navigable in winter (see Route 28 B, mile 41).
49	**Chung-chia-wei,** village on r. (70 houses).
52	**Chang-chia-chi,** market town, mostly on l. (150 houses).
56½	**Shên-chuang,** village on r. (30 houses).
59¼	**Shih-tzŭ-ch'iao,** walled market town on l. (100 houses).
	Here river passes under high wooden-pile bridge, and turning sharp north reaches **SHUYANG,** P. T., 4¾ miles away.
	At the bridge the road to Tsingkiangpu is rejoined (for details see Route 28 C, mile 53¼).
97	**TSINGKIANGPU,** P. T. RS.

ROUTE 29

HAICHOW TO NAN-CH'ÊNG (OR FÊNG-HUANG-CH'ÊNG) ($6\frac{1}{4}$ miles)

Authority: G. E. Pereira, March, 1908.

General direction E. First 3 miles along the road from Haichow to the main branch of the *Yen Ho* (No. 1), thence to the foot of important hills.

miles	
0	**HAICHOW,** P. T. (see *Gazetteer*). Leaving by the East Gate the route lies E. along slightly rising ground at the foot of *Haichow Shan* on r., with plain stretching away to l. (N.). The Haichow Shan, a high rocky ridge, is also called the Ching-p'ing Shan and Ch'ü-yang Shan. A small canal from the Yen Ho (No. 1) comes up to the NE. corner of Haichow, where it bifurcates. The longer branch (too shallow for boats) runs for about 1,500 yds. along the N. wall up to the North Gate ; whilst the other, which is deeper, runs for 400 yds. close to the E. wall, towards the East Gate, where boats discharge. The road, on leaving the East Gate, makes a slight semicircular bend to the S. to avoid this branch. It is paved for the first $\frac{1}{2}$ mile till some tombs are passed, and then continues unpaved to Nan-ch'êng. It is much used by wheelbarrows, and with very little difficulty could be made into a good cart-road. At present it is for the most part uneven, stony, broken in parts, and sometimes sandy.
$1\frac{1}{4}$	**Hsin-ho-t'ou,** village of 5 houses (see Route 28 A, mile $2\frac{3}{4}$).
$1\frac{3}{4}$	*K'ung-wang Shan* (200 ft.), a rocky peak, is the NE. extremity of the Haichow Shan. Just before reaching it the road bends SE., passing after 600 yds. through the village of **Ch'ü-shan-chuang** (20 houses).

miles

3 The main branch of *Yen Ho* (No. 1) is crossed by a bridge, consisting of a boat with planks, removable when necessary. The route lies E. across a great plain, and passes through **Yen-ch'ih,** a village of 70 scattered huts, with salt-pans. Plain mostly covered by a tall weed, known as 'huang-hao', largely used for fuel, and a little wheat. Small canal on r.

5 Canal on r. joins another running N. and S., 25 ft. wide, crossed by bridge of three planks.

6 Route crosses minor branch of *Yen Ho*, 25–30 ft. wide, and 2 ft. deep. This branch separates from the main channel at Panpu (see Route 28 A, mile $12\frac{1}{4}$).

$6\frac{1}{4}$ Bridge of three removable planks.

Nan-ch'êng or **Fêng-huang-ch'êng,** South Gate. Town is surrounded by a stone wall, 15–20 ft. high, much broken in places, passing over hills, 200–300 ft. high, on E. and W. side, and enclosing an area of about $1\frac{1}{2}$ miles from E. to W., and 1 mile from N. to S. These hills are at the southern extremity of the group, near the sea on the N., of which the *Yün-t'ai Shan* (to the E. of Sinpuchen) is the highest peak. The range stretches for some distance to the NE. of the town. The only inhabited part of the latter is that occupying the southern central part of the enclosure, consisting of stone houses in narrow, crowded streets. The population is probably about 5,000. The rest of the interior space is hilly and rocky, or under cultivation. There are temples on the tops of both the eastern and western hills.

ROUTE 30

HAICHOW TO KIAOCHOW (SHANTUNG)

Authorities: H. R. Davies and G. E. Pereira, March, 1908 (Route A); German Map of Chihli and Shantung, 1907; J. Schulze, Nov. 1909 (Route B).

There are two land routes.

(A) Via Jihchaohsien (143 miles)

General direction NNE. This is the main direct road between these places, but for the last 30 miles there is said to be an alternative route farther to the E., passing through Wangtai. (For alternative route beyond Kanyü see Route 30 B, below.)

The road (usually 12 to 16 ft. wide) is regularly used by wheelbarrows and pack-animals (donkeys) throughout its length. Between Tsingkow and Chiu-li-ch'i it is practicable for carts, and is used by them to some extent.

The road is practically level, but beyond Jihchaohsien becomes slightly undulating, the biggest rise being a gradual one of about 150 ft. beyond mile 106. It is not as a rule sunken, but after rain would probably become heavy, though never so bad as to be impassable for wheelbarrows. The surrounding country is flat in the first stages (as far as mile 20) and liable to floods. The sea, at places only 3 to 4 miles distant, is never visible. Subsequently hills (the highest 2,000 ft.) are always in sight on one or both sides, and sometimes close to the road. Where the country is flat it is under wheat in winter, except for some uncultivated salt land near Haichow. Crop of reeds, used for fuel and salt-pans. The hills are uncultivated and as a rule bare, though fir-trees grow in places. The country beyond mile 20 is intersected by deep watercourses. These are usually crossed by wooden trestle bridges (there are 3 such bridges between Haichow and Tung-kuan-chuang, and not less than 6 between the

latter and Tsingkow). The road is, on the whole, suitable for cavalry, but not practicable for wheeled artillery. Villages are fairly numerous, and market towns occur at intervals. Houses in the plain are of mud, except in towns where they are of bricks. The rivers in winter have for the most part only a few inches of water flowing in a narrow channel down a wide sandy bed. Camping-ground can be found anywhere.

Flour, vegetables, and millet are available in fair quantities in market towns. Flour in large quantities in the Haifoong Flour-mill at Sinpuchen. Grass very scarce in March. Animals are fed chiefly on millet, chopped millet stalks, and bran.

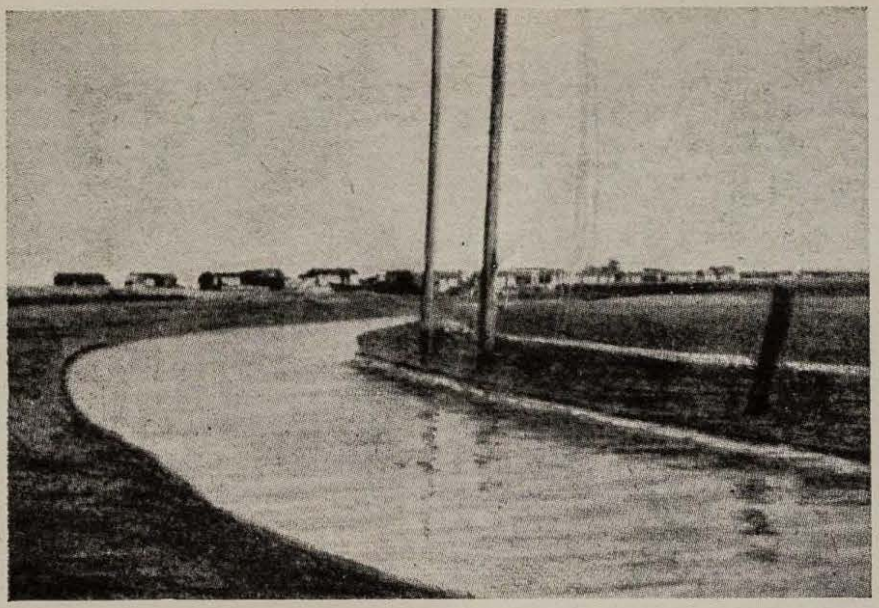
Water at Sinpuchen is undrinkable owing to salt, and has to be brought chiefly from Panpu, 12 miles off (see Route 28 A, mile 12¼), and from the hills to the S. Water is obtained at Tsingkow from the river and from wells. Wells are the chief source of supply along the route, but the water from them is not always good. Rivers with water in them in March are mentioned where they occur.

Transport on this road is chiefly by wheelbarrows, some of which are drawn by donkeys. Large quantities of wheelbarrows are easily obtainable at Sinpuchen, Tsingkow, and Kiaochow, but in other places they would take time to collect.

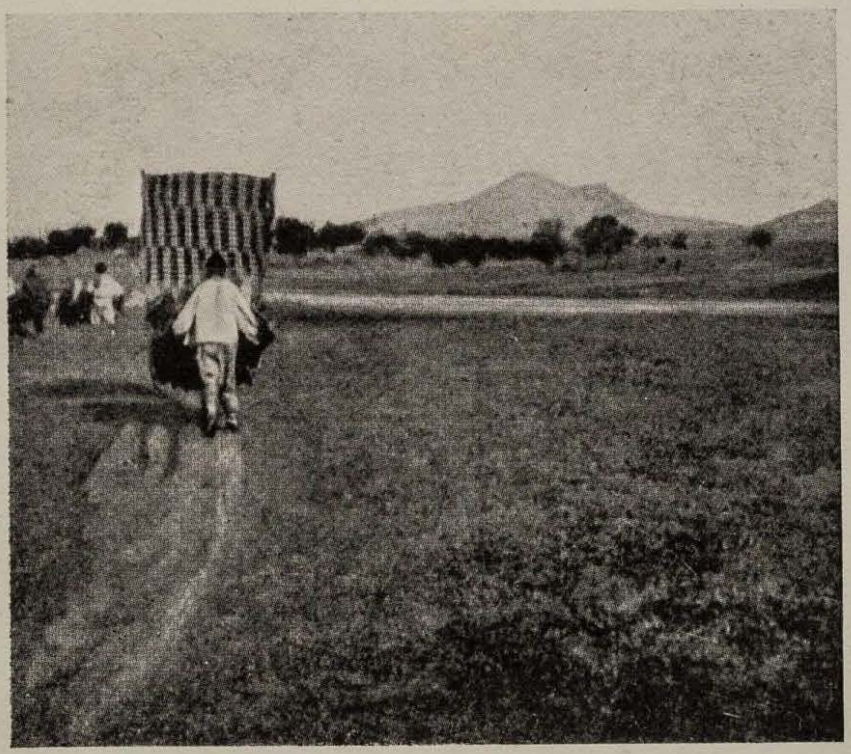
The telegraph follows the road on l. as far as Tsingkow.

miles	
0	**Sinpuchen,** P. (port of **HAICHOW,** P. T.—see *Gazetteer*). General direction N. Good wheelbarrow road over flat country, partly salt plains and partly under cultivation. From the Bean-oil Mill, at Sinpuchen, the *Yen Ho* (No. 1) is crossed by a wooden bridge, passable for wheelbarrows. Route lies across flat plain to
1	**Lin-hung-t'an** (35 houses), on r. bank of *Haichow Ho* (or Ch'iang-wei Ho, locally Ch'ao Ho), and
1¾	down its bank to *ferry*, ¾ mile farther on, where the crossing is made by a boat, taking 10 barrows.

miles	
	and 20 men, or 40 to 50 men. The river is 40 to 70 yds. wide, muddy and tidal.
3¾	Route joins road and telegraph line from **Haichow** (4 miles S.). The Haichow road crosses the Haichow Ho by a large ferry-boat (when there is enough water), and passes through **Fu-an-t'an** (100 houses). From Haichow to the ferry the road is good and about 16 ft wide. N. of ferry road is 6 ft. wide, but it soon increases to 12 ft., partly raised and partly on level; no culverts.
	Near junction of roads canal, 10 ft. wide, with 6 ft. embankment, crossed by plank bridge. Some salt-pans. Waste land on r., an occasional patch of cultivation on l.
6¾	Route crosses a tidal stream by a wooden trestle bridge, 35 yds. long. **Sha-t'ou** (400 houses), 1 mile to r. on l. bank of stream.
7½	**Tung-kuan-t'uan** (25 houses).
8½	**Tung-kuan-chuang** (30 to 40 houses). Fair 16-ft. road, but liable to be cut up by wheelbarrows.
10½	**Liu-chia-k'ou,** village (about 30 houses). Bridge of planks, 64 yds. long, on 10 trestles, over the *Man-tzŭ-wan*, a tidal river.
12	Plank bridge, 82 yds. long, on 17 trestles, over nearly dry bed. Villages more numerous.
13	Plank bridge, 63 yds. long, over stream, nearly dry at low water. 50 ft. hill 2 miles to W.
13¾	Plank bridge, 35 yds. long, over small stream.
14	**Fan-chia-tien** (about 50 houses). Farm-carts fairly numerous. Good 12 ft. road.
15¼	Plank bridge, 23 yds. long, over small stream. Road again furrowed by wheelbarrows.
16	Plank bridge, 55 yds. long, over tidal river; 1 ft. of depth at low water.
17	**Ching-chia-yüan** (about 20 houses). Wooden trestle bridge, 46 yds. long, over the *Hsia Ho.*



NORTH KIANGSU: CREEK AT HSIA-K'OU



NORTH KIANGSU: SAIL-BARROW

miles

19 **TSINGKOW,** P. T. (see *Gazetteer*). Town (10,000 to 15,000 inhabitants) entered by the *South Gate*.

Its harbour, **Hsia-k'ou,** distance 10 li by land, 20 li by river (nearly dry to S. of town), is accessible only to small junks; sea-going boats have to anchor outside a sand-bank.

19½ Route leaves the town by *North Gate*. General direction NNE.

Here alternative route (30 B) branches off to l.

21½ **Chu-hsü** (30 houses).

23½ **Ta-p'an-tzŭ** (25 houses).

24½ **Ta-hsing-chuang,** market village (70 houses). Tidal stream, 25 yds. broad, 1 ft. deep at low water, crossed by wooden trestle bridge, passable only for barrows. Carts would be obliged to ford, and could not cross in the rainy season.

26¾ **Li-chia-hang** (30 houses). Stream nearly dry at low water. Crossed by trestle bridge for barrows.

27½ **Hai-t'ou,** market village of 130 houses. Beyond it the *Yen-ching Ho* (10 yds. broad, 1 ft. deep) is crossed. Barrows ford it, and foot-passengers cross by a tub-ferry, holding 6 men. At the mouth of this stream is **Chü-mên-k'ou,** to which sea-junks come.

29 **Chu-kao** (35 houses).

32¼ **Ta-sha** (30 houses), beyond which a small tidal creek is crossed, which for 200 yds. would be heavy mud after rain.

33½ **Chiu-li-ch'i** (50 houses and some inns). General direction NNE. Level road, good for wheelbarrows.

37¾ **Chê-wang,** market village of 70 houses and some inns.

39½ Road to the r. front to **Antungwei,** P., a walled town of 600 houses, 4½ miles distant, in the province of Shantung.

42½ **Fên-shui,** the first village in Shantung province.

miles	
	(According to German map this village is still in Kiangsu.)
47	**Hu-shan-p'u,** a village of 30 houses. A road from Antungwei joins on r. General direction NNE. Good level barrow road. Hills visible on l.
49½	**Mi-t'ien-kou** (Li-tien-kou on German map), village of 25 houses.
52½	**Kao-wang-chuang** (35 houses).
53½	Route crosses the *Chu-tzŭ Ho* (10 yds. broad and 6 in. deep), in a sandy bed 60 yds. wide, by a wooden bridge. Large plantations of bamboo, fir, and other trees along this river, and water appears good.
54½	Stream (25 yds. broad and 2 ft. deep), crossed by a wooden bridge at **Nan-tien** (25 houses).
55	South Gate of **Taolochen** (T'ao-lo-k'ou), P., a market town of 600 houses, surrounded by a wall of stone and brick, 20 ft. high. Water from wells. Supplies fairly plentiful. General direction NNE. Level road. Route leaves by the North Gate.
61	**Fu-t'un** (30 houses).
61¾	Route crosses the *Fu-t'un Ho*, a river 25 yds. wide, 1 ft. deep, crossed by stone-slab bridge. The river bed is 500 yds. wide, and sandy, as is some of the country in the vicinity, especially for ¼ mile on r. bank.
63	**Chai-shang,** also called Liu-chia-chai (35 houses).
67	**JIHCHAOHSIEN,** P., a walled city of 1,000 houses. General direction NE. Practically level road. In this section two hills, *Ssŭ Shan* (1,500 ft.) on r., and *Ho Shan* (2,000 ft.) on l., are passed. Route passes through the city of Jihchaohsien, and leaves it by the North Gate.
67¾	Stream 3 yds. broad, 3 in. deep, in sandy bed 60 yds. wide.
70	**Lien-ts'un** (50 houses).

miles	
72½	**Hsü-chia-kuan-chuang.**
74½	**Ch'a-lu-k'ou** (12 houses).
75½	**Chên-chia-chuang** (12 houses).
78½	**Sung-kang-kou** (25 houses).
80½	**Liang-ch'êng-chi,** village of 350 houses surrounded by a mud wall 20 ft. high. General direction N. Practically level road, with slight undulations.
81	Route crosses the *Yi-shui*, a stream 5 yds. broad by 6 in. deep, in a sandy bed 400 yds. wide.
83¾	**Hsien-ku** (30 houses), on l. of road.
85	**Kuo-chia-ch'iao** (12 houses).
88¼	**Ch'üan-yi-ch'ang,** 60 houses, surrounded by a mud wall.
92	**San-li-chuang** (18 houses).
95	Route crosses stream of good water, 3 yds. broad and 3 in. deep.
96	**Ling-wu-kuan,** village of 30 houses. General direction N. Road through slightly undulating country, with one rise of 150 ft. leading up the valley of a small stream, ¼ mile wide, thickly wooded, and with hills sloping gradually up from it on either side.
99½	**Chang-ku-chuang** (45 houses).
103	**Shih-ho-t'ou** (35 houses).
106½	Route leaves the valley, and ascends very gradually to **T'ien-ch'i-ling** (15 houses) at the top of a ridge about 150 ft. above the plain. This ascent can only be made slowly by wheelbarrows. From here very gradual descent to
110¼	**Ch'ing-yün-ssŭ** (10 houses).
110¾	Route crosses stream (2 yds. broad and 3 in. deep).
111	**Hua-chia-chuang** (10 houses). General direction NE. Country slightly undulating. Road good for wheelbarrows.
115¼	**Pai-hsiang** (60 houses).
115¾	Stream 3 yds. broad and 3 in. deep, in sandy bed 300 yds. wide.

miles	
117¼	**Tsui-p'o** (30 houses).
120	Deserted city of **Mu-ma-ch'êng** on l., surrounded by a mud wall. None of the houses are left standing.
121	**Li-ch'a** (45 houses).
122	**Kan-ku-chuang** (20 houses), on a stream 1 yd. broad and 2 in. deep.
125½	**Chang-ying,** a village of 80 houses. General direction NE. Good wheelbarrow road over slightly undulating ground.
127	**Yang-ho-yai** (10 houses), with a mud wall. From here road follows l. bank of the valley of the *Yang Ho*, 5 yds. broad and 6 in. deep.
127½	**Chang-chia-chuang** (30 houses). Road crosses a tributary (1 yd. broad and 2 in. deep).
129½	**Wo-lou** (20 houses). Road turns l. away from the *Yang Ho* valley.
130½	**Shan-ssŭ** (45 houses).
130¾	Stream 2 yds. broad and 1 in. deep.
134½	**Tu-ts'un** (60 houses), on a stream 2 yds. broad and 3 in. deep.
138½	**Li-chia-tien** (40 houses). From here there is a slight descent (50–100 ft.) into the plain of Kiao-chow.
143	**KIAOCHOW CITY,** P. T. RS., a large walled city. Route enters by the SW. gate, called the *Shun-tê Mên*. The railway station is outside it to the N., about 1½ miles from the *Shun-tê Mên*.

(B) Via Chüchow Sung (about 181 miles)

The route lies partly through well-cultivated and densely populated regions, partly through barren mountainous districts. In the former, much wheat is grown, also beans, sweet potatoes, kaoliang, and peanuts ; cabbages and turnips are plentiful, but rice has to be imported; very little meat available. In the latter, some cattle, sheep, and chiefly pigs

are to be found, especially between Chüchow Sung and Chihkow (province of Shantung).

Road suitable only for wheelbarrows and small carts; fairly good in dry weather, but almost impracticable after heavy rain. In Shantung wagons drawn by oxen use it to a considerable extent.

As far as Tsingkow the present route is identical with Route 30 A. At Chü-ch'êng it reaches the lower spurs of the Shantung hills and continues in a mountainous district nearly as far as Chüchow Sung. The border of the Shantung province is crossed just below San-chieh-shou.

li	miles (approx.)	
0	0	**Sinpuchen,** P.(port of **HAICHOW**). For details up to mile 19½ see Route 30 A.
	19½	**TSINGKOW,** P. T. (see *Gazetteer*). Route leaves by the *North Gate* and continues NNW. among graves.
		Route A branches off to r.
		Fair 6-ft. road.
	21	Fair path (4 to 6 ft.) across fields.
	23¼	**Kanyü,** P. Town of 4,000 to 5,000 inhabitants, surrounded by battlemented brick wall. Said to be the resort of salt smugglers and brigands. (The harbour, **Chu-p'êng-k'ou,** is about 6 miles NE.)
		Route enters by small gate at eastern corner of S. wall, with single entrance. Main South Gate to W. of it has double entrance.
82 [1]	23¾	*Yamên* in centre of city.
		Road to Ichowfu turns off W. (see Route 31 A).
90	26½	**Chü-ch'êng,** small town with mud wall. Road leaves the plain and draws near to the embankments of the *Ching-k'ou Ho* (local name, Hei-li Ho).

[1] The *li* in this district is noticeably shorter than it is farther south. Here 10 li are approximately equal to 3 miles.

li	miles (approx.)	
110	33	**Pan-lu-ts'un,** village. About 1½ miles to the r. of the road is *Wu Shan*, a high peak with mist-capped summit seen from as far off as Haichow.
120	36	**Hei-lin,** village. A few miles beyond it the road leaves the province of *Kiangsu* (here popularly called Kiangnan).
135	40½	**San-chieh-shou,** first village in *Shantung*. Soil particularly stony and almost barren. Population sparse.
140	42	*Old Fort* to l. on a hill.
165	49½	**Shihtzelu,** P., village. Just beyond it road crosses the *Sha Ho*, a tributary of the *Shu Ho*.
190	57	**Yen-pin,** village (called Yen-tien on English and German maps). Road skirts the *Chin-ting-lien-hua Shan*, a conspicuous mountain to the E.
198	59½	**Shih-kou,** large village with white-washed cottages and of more prosperous appearance. The soil in the neighbourhood is more fertile (even vine and tobacco grown here). A little distance beyond the village land again stony and barren. General direction N.
210	63	**Tatien Sung,** P., small town.
230	69	**Hsiao-tien,** village.
250	75	**Shih-ching,** large village. Beyond the village the road leaves the hills, enters a fertile plain, and crosses the *Shu Ho*.
285	85½	**CHÜCHOW SUNG,** P. Some fine temples in good state of preservation. German and American missions. Important market for cattle, donkeys, and cloth. Beyond the town the route crosses the Shu Ho and lies again through hilly and sparsely populated districts. Several small villages ; houses roughly built of stone with thatched roofs. Route leaves by the E. gate. Direction at first ENE., then NNE.

li	miles (approx.)	
	87	**Wu-chia-wa,** on r.
	88	**T'ao-yüan,** on r.
	88½	**Ch'i-li-chuang.**
	90	**Tung-chia-tao.**
	91½	**Yang-chia-tien-tzŭ.** An alternative route branches off to r., passes through a hilly district, and rejoins main road at Chucheng. Beyond the village route crosses a creek.
	92¾	**Chuang-to,** on r. Before reaching the village, route crosses another branch of the same creek.
	93¼	**Ch'i-chia-t'un,** on l. Route skirts low range of hills on l.
	94¼	**Hsiu-chuang,** on l. **Hsiao-hsiu-chuang,** on opposite side of road.
	95¼	**T'u-kou.**
	96¼	**Lu-wa.**
	96¾	**San-shih-li-p'u.**
	97½	**Shuang-miao.**
	98	**Hsiao-lo-chuang.**
	98¾	**So-chuang.**
	99½	**Chao-hsien-chi.** Several roads meet here. A road goes NW. to Ishui, another due N. to Ankiu. The present route continues NW.
	100¾	**Ta-p'u.**
	101¾	**Mei-chia-kuan-chuang.**
	102½	**Ch'ing-ko-tien.**
	103½	**Hsin-tien-chi.** Route passes at foot of hill on l.
	104¼	**Liu-chia-tien.** Route passes over hilly ground.
	106¾	Road crosses the *Wei Ho*, which from this point runs parallel with the road for a considerable distance.
375	107¼	**Kuan-shu** (Kuan-shui ?), large village, beyond which the road finally leaves mountainous district and enters well-cultivated and densely populated plain.

li	miles (approx.)	
	108	**Pei-tien.**
	112	**Lung-wang-miao.**
	116	**Wang-hu-chuang.** Road bends ENE.
	116½	Road crosses small tributary of the Wei Ho.
	117	**Hsiao-shan,** on l. Road bends E.
	120	**Hsiao-shih-ch'iao.**
	120¼	**Hou-wang.**
410	121	Route crosses over to r. bank of Wei Ho by a ford (which in winter presents no difficulties), and skirts hills on r.
	123	**Liu-ch'ing-ho.** Before entering the village route crosses a tributary of the Wei Ho.
425	124½	**Chihkow,** P., a large walled village. Direction NE.
	125	Route crosses another tributary of the Wei Ho.
	127	**Ch'iao-chuang.**
	128¾	**Shan-chuang.**
	130¾	**Wang-chia-tien.** Hills end here.
	131½	Route crosses the *Hsi Ho*, a tributary of the Wei Ho.
	132¾	**Lü-piao.**
	136	**Shih-li-p'u.**
	138½	**Cha-tao-k'ou.**
465	139¾	**Chucheng,** P., walled town with a small garrison. An important market for horses held outside the city gates. Route enters by W. gate and leaves by E. gate. Direction ENE. A road to Kaomi and another to Kingchih and to Ankiu leave by the N. gate.
	141¾	**Cha-ko-tien.**
	143	**Shih-li-pu.**
	143½	**Shui-chia.**
	145¼	Village, beyond which route crosses a branch of the *Lu Ho*.

li	miles (approx.)	
	146¼	Route crosses another branch of the Lu Ho, and passes through some villages.
	147¾	**Sha-lin-tzŭ.**
	148¾	**Sinhing,** P.
	149¼	Route crosses creek after passing through small village.
	149¾	**Tung-hsin-hsing.** Beyond this village route crosses another branch of same creek.
	150¾	**Hua-yüan.**
	152	**Hsiao-sao-po,** on r.
	152½	**Wang-chia-t'un,** on l.
	153¼	**Sao-po.**
	154	**Ko-chia-t'un.**
	155¼	**Chuang-chia-yo-k'ou,** on r.
	156½	**Tsang-chia-t'un.**
	157½	**Nei-kou.**
	159½	Road bends N.
	160¼	**Sêng-chia-chuang.**
	161	**T'an-p'u-chi.** Route bends ENE. Road to Yang-ho branches off to r.
	172	Route passes through village and crosses the *Mi-shui Ho.*
	172½	**Fan-ku,** on the opposite bank. Route again in mountainous district.
	174½	**Kuan-ko-t'uan.**
	176½	**Yin-chia-tien.** Route crosses a creek.
	180	Route follows bank of creek.
605	181½	**KIAOCHOW CITY,** P. T. RS.

ROUTE 31

HAICHOW TO SÜCHOWFU

Authorities: G. E. Pereira, March, 1908; Official Survey of Tientsin-Pukow Railway, 1908 (Route A); W. Lewisohn, 1910 (Route B).

General direction W. There are three alternative routes.

(A) Via Kanyü and Ichowfu (179½ miles)

This route can be conveniently divided into 3 sections :

(1) *Haichow to Kanyü* (23¾ miles)

0 **Sinpuchen,** P. (Port of **Haichow**).
(For details see Route 30 B.)

23¾ **Kanyü,** P. T.

(2) *Kanyü to Ichowfu* (52 miles)

General direction NW. The road varies considerably. For the first 25 miles its width is from 6 ft. to 12 ft. ; and it is much cut up by wheelbarrows and farm-carts, for which latter it is practicable in spite of an occasional bad part. It widens in places to between 20 and 25 ft. There is a ferry over one small river ; and several beds of streams have to be crossed, some dry and others partially so. Between Ching-chia-tien and Ichowfu its width varies from 6 to 15 ft., and it is in places sunken. It is for the most part in good condition, but in some places is furrowed by wheelbarrow ruts. The soil is generally sandy.

In the first stage there are hills and rising ground to the N. The plains are under crops of spring rice (? wheat). In the second, there are again low hills to the N. for the first 6 or 7 miles, and an occasional one to the S. ; otherwise it is uniformly flat.

Villages of mud huts are dotted about on the plains.

Wheelbarrows are the chief means of transport ; but there are also to be had a good number of well-constructed farm-

carts with sound wheels, drawn by bullocks and donkeys. Of these animals there is a large number, and there are besides a few water-buffaloes and mules. Peking carts can be hired at Ichowfu, but not on the Kiangsu side of the border.

Houses are of mud or loose stones. Inns poor.

A certain amount of metalling for the repair of the road would be obtainable.

The telegraph branches off to the W. after the first couple of miles, and is not seen again throughout the route.

miles	
23¾	**Kanyü,** P. From *Yamên* in centre of town, route leaves by *West Gate* (with single entrance) and continues W. across a plain dotted with villages. Crop of spring wheat in fields. In summer the chief crops are millet, beans, kaoliang, maize, and sesame. Fair 8-ft. road across the fields, though furrowed by farm-carts. Low hills in distance to NNW.
25¼	**Shao-chia-lin** (20 houses).
26½	4-ft. to 6-ft. road across the fields.
28	**Chuang-chia-liu-ts'un** (80 houses).
	Chü-ch'êng, town with mud wall, about 4 miles to N. (see Route 30 B, mile 26½).
29¼	*Ch'ing-tun Ho,* 30 ft. wide, 3 ft. deep, crossed by tub-boat ferry.
30¼	**Ch'ing-tun** (40 houses). Road 10 ft. wide, sunken 3–6 ft., with deep cart-ruts. Direction WSW.
31	**Ho-ts'ao** (50 houses). Road in poor condition, 4 ft. wide, on level with fields.
32	Road somewhat broken, 15 ft. wide, and slightly sunken. Direction W.
33½	**Ch'êng-t'ou-chên,** 200 houses with poor inns. Direction WSW., over slight ridge.
34¾	Road 10 ft. wide, still rather cut up by wheelbarrows, and in parts sunken 3–6 ft.
35	Cross dry bed of stream.
36¼	**Tien-ma-ch'ang** (50 houses).
37	Over another slight ridge. Direction W.

miles	
37½	**Yen-chia-chuang** (40 houses). The *Chia Shan*, a 300-ft. peak, about a mile to N. High hills to NNE. From here, hills or rising ground are met with about a mile distant to the N. Higher peaks are sometimes seen behind them. Roads sunken in many places, and sometimes much cut up by ruts. Route crosses sandy river-bed.
39	**Ta-kou-yai** (50 houses), built partly of rough stones. Route is over lower slopes of hills on N. Plain on S. Road much cut up for a mile.
40	Road 10 ft. wide, and in fair condition. Direction WNW.
41½	**Hsin-chi** (100 houses). Road in places 30 ft. wide. Forward bearing, 280°. Leaving village, boundary of Shantung province is crossed.
44¼	Road crosses a down 50 ft. high, on top of which is **Ssŭ-chien-wu** (5 houses). Road 12 ft. wide, and in good condition, but gets narrower and broken as it descends.
	Higher hills 3 or 4 miles to N.
45½	**T'ien-chia-hou** (80 houses), on lower ground.
46¾	**Pa-chien-wu** (8 houses) on top of a second down. Forward bearing 297°. Country stony. Fair road, in places 27 ft. wide.
49¼	**Ching-chia-tien** (150 houses).
	Telegraph from Tsingkow to Ichowfu passes to S. of village, but after a mile or two is lost sight of, as road keeps farther N.
	Direction 300° across plain, fair 15–25-ft. road. Peak of 400 ft., and lower hills 2 miles to N. Low downs two or three miles to S., running W.
	Crop of spring wheat in fields.
50	**Yü-tien-tzŭ** (60 houses). Rising ground a mile to N.
52½	**Hsia-chuang,** 200 houses with inns. Direction NW. Soil rather sandy. Rising ground 600 yds. to r.

miles	
53¾	Forward bearing 325° round orchard. Road crosses nearly dry, sandy river-bed.
54	**Kou-t'ou-chuang** (50 houses). Low hills 4 miles to N., gradually approaching to within 2 miles of road. Direction NW. Fair road 6–10 ft. wide across fields.
57	**Chang-chia-t'un** (40 houses). Forward bearing 325°.
59	**Shihputze,** P. (100 houses), with wall of loose stones. Forward bearing 305°.
60½	**Yeh-pu-chuang** (20 houses). Hill 50 ft. high, ¾ mile to l. Forward bearing 290°.
60¾	Route crosses nearly dry stream, followed by a sandy belt.
61¼	*Mao-tzŭ Ho,* flowing south, 1 ft. deep, crossed by brushwood bridge 45 yds. long ; sandy bed. River always too shallow for boats, even in summer.
61½	**Ch'ên-chia-ts'un** (80 houses), on r. Through wood, many fruit-trees.
62	**Hsü-chia-ts'un** (100 houses), on r. Across fields. Direction NW.
62¾	**Chung-kou-chieh** (100 houses). Road turns to N. out of main street. Forward bearing 320° across cultivated plain dotted with villages. Good 10-ft. road.
64¾	**T'ien-chia-chuang** (10 houses). Forward bearing 300°.
66¼	**Ch'iu-ch'i-yüan** (40 houses). Direction NW. Road in places 4 ft. wide, and sunken 4 ft. below surface for a short distance.
67	**Yü-huang-miao** (200 houses). Forward bearing 295°.
68	**Shih-pei** (20 houses). Fair 10-ft. road.
70½	**Po-pu** (100 houses), on r. Good 15-ft. road.
71½	50-ft. hill, ¾ mile to S.
72¾	**Li-chia-chuang** (60 houses), on r. 50-ft. hill 1 mile to S.
73½	**Chiu-ch'ü** (20 houses). Road passes over river embankment 10 ft. high.

miles	
73¾	Road leaves embankment and crosses sandy bed of *Yi Ho*, 1,800 yds. wide. River itself is crossed by four bridges of planks and low trestles, at points where the widths are 107, 66, 42, and 11 yds. respectively. River 1 ft. at deepest; water clear; bed sandy; direction of stream S.
	House-boats can go to Tsingkiangpu in the summer.
74¾	Sandy belt ends. Road sunken 8 ft.
75¾	**ICHOWFU,** P. T. South gate with triple entrance. Walled city of 60,000 inhabitants.

(3) *Ichowfu to Süchowfu* (103¾ miles)

General direction WSW. to Hanchwang, then S. The road varies considerably, but may on the whole be considered fair, averaging from 8 to 12 ft. in breadth, though in places it is no more than 4 ft. Occasionally it is rocky; sometimes much cut up with cart-ruts; and in the last stage parts of it are sandy. It joins finally with the broad 20-ft. main road from Yenchowfu to Süchowfu. It is much used by wheelbarrows, and is passable for carts throughout its length. The surrounding country is for the most part hilly, the highest peaks being from 400 to 500 ft. high. The hills are treeless and covered with grass. Sometimes they are stony. In the second stage the road runs through a valley formed by a chain of these rough hills for a distance of 2¼ miles.

Villages are numerous throughout the route. The houses are built of mud or of rough stones, and they and the inns are poor and primitive. The plains are cultivated, and at the time when this report was made, were under a crop of spring rice. Carts are difficult to get, and only occasionally available. Most of the transport is done by wheelbarrows, of which there are two kinds, one for a single man, and the other (known as *êrh-pa-shou*) for two. Donkeys and bullocks are fairly plentiful; there are also a few mules and ponies. Farm-carts in small numbers can be procured in some of the

villages. Near the *Grand Canal* they are more numerous, and those to the N. of it are of strong build, with two wheels ; those to the S. have four.

The country from Ichowfu to Süchowfu is a poor one. It has not yet recovered from the effects of the T'ai-p'ing rebellion, and in 1907 was devastated by famine. As usual on the borders of provinces, brigands are numerous, but they do not molest Europeans. The part most infested by them is to the E. of this route ; more particularly the city of Tancheng, which has a bad reputation for desperate characters (see Route 32 A, mile 107).

miles	
75¾	**ICHOWFU,** P. T. Route leaves through *South Gate* and suburb beyond it (mud wall 14 ft. high).
76¼	Forward bearing 233° across plain, under spring wheat, dotted with villages. 50-ft. sandy hills S. of S. suburb. Good 15-ft. road. Road crosses two or three dry river-beds by bridges paved with stone. Many donkeys and bullocks in fields.
78¾	**Ch'i-li-kou** (70 houses), with a mud wall, 300 yds. to r.
81¼	**Pai-chia-chuang** (40 houses). Good 12-ft. to 15-ft. road. Forward bearing 213°.
83¼	**Hu-tz'ŭ-yai** (200 houses), on a down 50 ft. above level, running east. Road rocky for 200 yards. Hills in distance to W.
85	**Chuchen,** P. Over 1,000 stone houses, surrounded by 8-ft. to 14-ft. wall of loose stones. Chief industry is the manufacture of earthenware pottery. *T'ai-liu Shan*, two 400- to 500-ft. peaks, 5½ miles to SE. Road crosses stone bridge over the *Chuchen Ho*, 40 yds. wide, 9 in. deep, flowing W. ; then over a rise of 30 ft. and across plain. Broken hills 300 ft. to 400 ft. high, 5 or 6 miles to W. Good 8 to 12-ft. road.
88½	**Li-chia-chuang** (50 mud huts). Good 6- to 8-ft. road. Undulating country 1 mile to E.
90¼	Over 20-ft. ridge.

miles	
90¾	**Ching-shan** (50 stone houses). *Ching Shan*, 100 ft. high, on r. Along rocky and stony road, with 50-ft. hills one to two miles on r.
92½	*Shên Shan*, with tower on top, 300 ft. high, and lower stony hills 200 yds. on l.
93	**Liu-hao-tien** (70 stone houses). Very stony and rocky road. Slight and gradual rise.
94¼	Road still for the most part rocky. Ground slightly undulating. 200-ft. hills 400 yds. on r. 300-ft. hills ¾ mile on l., running SW.
95	**T'ao-shan-tien** (30 stone houses).
95½	100-ft. hills, running SW., ¾ mile to r. Good 6 to 8-ft road. Very gradual rise.
96¾	Over 20-ft. rocky ridge. Hills to l. recede. Across plain, hills 6 or 7 miles to r., running S.
98¼	**Tso-ch'êng** (70 stone houses), on l.
100¼	100-ft. hills, 3 miles on l., and 1 mile on r. **Yen-t'ou-tien** (50 mud huts), on r. Road crosses *Yen-t'ou Ho*, 20 ft. wide, 6 in. deep, with clear water and sandy bed, by stone bridge (paved) on 25 low stone piers. River flows SE. Road beyond rocky, with 50-ft. hill (temple on top) on l.
101¼	**Pienchwang,** P. 600 houses. Forward bearing, 235° across plain ; hills on r. gradually recede, plain stretches away to l. Good 12-ft. road. Villages fairly numerous.
102¼	**Tai-chia-ts'un** (70 houses).
102½	Stone bridge over nearly dry canal.
104¼	**Hsiao-chuang** (70 houses), on l.
106¾	**Yü-kou** (100 houses). Good 6-ft. road. Broken hills 100 ft. to 300 ft. high, with occasional higher peaks 6 or 7 miles to r. Canal on l., for the most part dry.
107¾	**Ma-chia-yü-kou** (50 houses). Road 6 ft. wide, and furrowed by ruts.
109½	**Ch'ên-chia-ch'iao** (100 houses). Route crosses *Ch'ên-chia Ho* by low stone bridge, 96 paces long.

miles	
	Water clear ; 20 ft. wide, 6 in. deep : flowing SSE., in nullah 30 ft. deep.
110	Hills receding 4 miles to N. A low peak several miles to SSW.
111½	**Ma-chia-lou** (80 houses), on r. Fair 6- to 12-ft. road.
112¾	100-ft. hill 300 yards to r.
113¼	**Jên-chia-p'u** (80 houses). Undulating on r., with 100- to 200-ft. hills 2 miles beyond. 50-ft. hill ¾ mile to l.
114½	Road along rising ground at foot of hills on r. ; plain on l., with a few low hills in distance. Road stony, and broken in places, 4 ft. wide as a rule.
115½	**Tung-hsin-hsing** (50 stone houses). Mostly good 8-ft. road across plain, though broken in parts. Hills 2 miles distant on r.
116¾	**Hsi-hsin-hsing,** market village of 60 houses. Road rocky and broken, 4 to 6 ft. wide, rising ground 4 miles to l., running NW. Low hills 2 miles to r. Fewer villages.
117¼	400-ft. hills 2 miles on l. ; 100-ft. hills 1 mile on r.
119	**Fu-shan-k'ou** (50 stone huts), with low, stony hills, 300 yds., increasing to 1 or 2 miles, distant on either side. Fair 4-ft. road.
120¼	**Lo-têng-chieh** (50 houses). Road crosses small stream flowing SE., in nullah 20 ft. deep. Road stony.
120½	**Shih-la** (20 houses). 100-ft. hill 600 yds. to r. ; and another ½ mile to l.
120¾	Fair 6-ft. road, occasionally stony, along valley between broken and irregular hills 1 mile to r., and 1½ mile on l.
122¼	Cross nullah, 10 ft. deep, running SW.
123	**Hsia-chuang** (40 houses). Direction 243°, still along valley ; fair 6- to 8-ft. road, broken in places.
124½	Hills on l. end. Route is across plain, with broken 200- to 300-ft. hills, 1 to 1½ miles on r. Distant hills on SSW., SW., and WSW.

miles

125¼ **Hsien-jên-ch'iao** (10 houses). Road crosses by stepping-stones nearly dry stream flowing SSE., in nullah 20 ft. deep.

126½ **Ta-kuan-chuang** (40 houses). Farm-carts in villages.

127¼ Road in places sunken 8 ft. 300-ft. hills 1½ miles on r.

128¼ **Ts'ao-chia-chuang** (40 houses) on r.

129 **Ch'i-li-tien** (40 houses), with an inn. 200-ft. and 300-ft. hills, 4 or 5 miles on l.

129½ **T'ien-chia-lou** (30 houses). Hills ½ mile on r. Good 10-ft. cart-road.

130¼ Road enters small E. suburb. The *T'an Shan*, 500 or 600 ft. high, ½ mile to the N., is at the entrance to a valley, running NNW.

130¾ **YIHSIEN,** P. T., a city between 700 and 800 yds. square, with usual type of battlemented wall (chiefly stone, with some bricks), 25 ft. high, surrounded by dry moat. The North Gate is single and the West Gate double. There is little waste ground inside the walls; houses are mostly of mud. Outside each of the four gates there are small suburbs of which the southern is the largest. Missionaries estimate the population at 20,000. It is probably, however, not more than 10,000 at the most. The American Presbyterians have four members in S. suburb, and the German Catholic Mission one priest in the city. Garrison consisted of 40 or 50 soldiers belonging to the magistrate, called Hsien-fang-tui or Hsien-tui, and 25 police. The city lies in NW. corner of a plain with 300-ft. hills to W. and SW. and *T'an Shan* NNE. There are valleys running NNW. and WSW.

The *T'ang-lang Ho*, a small stream, runs in a northerly direction outside the wall, then turns S. At this time of the year (March) it is only a few inches deep, but it is liable to flood the country S. of the city in the rainy season. Owing to the lowness of the

miles

bridges even small boats cannot pass from Yihsien to the *Grand Canal*, when the river is high. At the West Gate it is crossed by a low, broad, stone bridge leading to the W. suburb.

25 li to the NNW. are the coal mines of **Tsao-chwang,** said to be the largest in Shantung. A standard-gauge railway connects the mines with Lin-cheng Sung on the Tientsin Pukow line—distance 19 miles. Another line connects the mines with Taierhchwang on Grand Canal—distance 26 miles. See Route 19, sect. 2, mile 120, and Chap. IX, railway No. VIII.

Route enters by the *East Gate* with double entrance. After 300 yds. road turns S. into the centre of the city, and 350 yds. from this point leads through the *South Gate* with single entrance.

131¼ Inn in S. suburb.

The road leaves S. suburb of Yihsien, at forward bearing 185° across a plain, with *Hsing-lung Shan*, 500 ft. high, 2 miles WNW. The *T'ang-lang Ho* runs S., on r. of road. It is 20 ft. wide, 6 in. deep at deepest, and runs in a nullah 30 ft. deep. Good 12-ft. road.

132 Road sunken 8 ft. for ¾ mile.

132½ Cross the T'ang-lang Ho by low bridge unevenly paved with stone, 52 yds. long, 6 ft. to 8 ft. wide. Route leads through valley five miles wide, bounded by hills bare of trees, 300 to 500 ft. high. At the southern entrance is the *Chai Shan* (400 ft.), and at the northern the Hsing-lung Shan. Road on level with fields, 8 ft. broad, and furrowed by cart-ruts.

134¼ **Hao-kou** (30 houses), on l.

134¾ Join main road, coming from West Gate of Yihsien. Many small villages of mud huts. A good many farm-carts, usually drawn by two bullocks and a donkey. 12-ft. road, rather sandy, and occasionally sunken.

miles	
135¾	**Han-chia-lou** (40 houses), on r. Road bends to l. towards hills.
137¼	50-ft. spur from southern hills ½ mile to r.
137½	**Pu-chia-ts'un** (50 stone houses).
138¼	4-ft. rocky road passes over 20-ft. bridge, and then becomes sandy, and in places sunken three or four ft. Hills closing in on both sides. Country undulating.
139½	**Wang-chia-shan-k'ou** (50 houses), on side of 100-ft. hill to r. Gradual rise over rocky hills ; road rocky in parts.
140¼	Top of 150-ft. rise. Road in descent rather broken, and 4 ft. broad.
140¾	**Li-chia-shan-k'ou** (10 houses), on r. Across plain, at first slightly undulating. Many villages. Hills opening out on either side. Fair 4-ft. road, though rather broken, and occasionally sunken 6 ft.
141¾	**Ts'ai-yüan** (40 houses), 100 yds. on l. Plain now level.
142¾	**Chao-chia-chuang** (30 houses), on l. Road crosses shallow stream in nullah 10 ft. deep.
145	**Chowkiaying,** P. (800 houses). First forward bearing 212° across plain, slightly undulating for first mile. 10-ft. road, sandy, and rather cut up by ruts. Many small villages.
148	**Sha-ching** (30 houses), on r.
148¾	**Liu-chia-ch'iao** (50 houses), with small stone bridge over nearly dry stream.
150½	Under telegraph (with four wires) running NW.
151	**Hanchwang,** P. T. RS., large village (500 houses), mostly on the N. side of the *Grand Canal* (see Route 19, sect. 2, mile 149).
	Tientsin–Pukow Ry. passes to the E. of village, crosses the *Grand Canal*, and runs near the road all the way to Süchowfu. The telegraph line runs E. to Taierhchwang and S. to Süchowfu.
	Route crosses *Grand Canal*, at time of year referred

miles

to in report, by temporary bridge of boats, when it is a muddy stream, 20 ft. wide and 13 in. deep at deepest, 30 ft. below level of country. Current flows to the E. Bearing 285° up canal, to a double lock, ½ mile distant, dammed with boards, and with an earth dam 100 yds. farther W. to keep out the water of the *Wei-shan Hu* (more usually called Yi-shan Hu). This dam is sometimes cut by order of the Tao-t'ai when the water in the canal is exceptionally low ; but this is rarely done, as the lake water is required to supply a canal running to Süchowfu.

After crossing the *Grand Canal,* route joins main road from Yenchowfu and Tsinan. It is 15 ft. wide, sandy and furrowed by cart-ruts. Many farm-carts, with four solid wheels like those in region of the *Huai River.* Route crosses plain cultivated with spring wheat and dotted with villages. Telegraph to Süchowfu 300 yds. to l., just beyond railway line.

152¾ **Ling-tzŭ** (30 houses). Irregular 400-ft. hills running WSW. four or five miles to l. Road 20 ft. wide.

153¼ Route crosses Shantung–Kiangsu border.

154 Oil factory on r.

154½ **Likwoyi,** P. RS. About 1,000 houses. Nearly dry stream, crossed by stone bridge with three arches. Country undulating ; 15 ft. road, uneven and sandy, very stony for 300 yds. Bare and irregular grass hills, 200 to 400 ft. high, 1½ to 2 miles on l., running parallel to road. Telegraph and railway 100 yds. on l. Plain under cultivation. Few villages.

155 Gradual ascent over spur of hill. Road 25 ft. wide, and at first stony.

155½ Road level ; 200-ft. hill, ½ mile on r.

155¾ **Mao-shan.**

156½ **Lo-chuang.**

157¼ **Ti-pa** (Chi-phu), 70 stone houses. Road stony and sunken 3 ft., but no longer sandy. Forward bearing

miles

190°. Irregular 100-ft. to 200-ft. grass hills about ½ mile on r.

159½ **Kao-huang-miao** (30 stone houses), with watch-tower on 30-ft. mound on l.

160½ **Tung-kuan,** on l.

160¾ Stony road, with gradual rise. Rocky hills, ½ mile distant on either side.

162¼ **Wu-li-tien** (10 stone houses), on top of 100-ft. rise. Descent gradual and stony. Telegraph crosses to r. of road.

163¼ Level road, through undulating country. Forward bearing 165°. Hills 3 miles on l. and ½ mile on r., gradually receding.

163¾ **Liu-ch'üan** (Liu-chuang), RS. (80 stone houses), surrounded by 8-ft. wall of loose stones. Telegraph along valley, bearing 140°. Road cut up by ruts, and no longer stony. Railway crosses the road from l. to r. and ½ mile beyond crosses again to l. of road.

164¼ Forward bearing 220°.

A smaller road goes straight on to **Shih-tsai-yi,** 1½ miles distant.

Hills, 1½ miles away, on either side.

165¾ **Tien-tzŭ-chieh** (50 stone houses) Hills ½ mile away on r. and ¾ mile on l.

166½ **Kang-shang** (10 houses). Sandy road, stony in parts, but on the whole in better condition.

167¾ **T'an-shan** (30 houses,) at foot of hill on r.

168¼ **Yo-li** on l.

168¾ **Tien-chieh** (Dien-tse) on r.

169½ Pass between stony 100-ft. hills.

170 **Mao-ts'un,** RS. (apparently this is the place marked Mei-chuang-tien on Chinese map). Village of 70 houses. The railway station is near the road about 1 mile farther S. Plain opens out. Wheelbarrows, lightly loaded, can perform the distance (15½ miles) from Likwoyi in 5 hours. Route crosses three-arch

miles

bridge over nearly dry canal, connecting the south end of *Wei-shan* Lake with the *Grand Canal*, near which it becomes practicable for boats. Road leads across plain, the only hills in sight being some low ones, three or four miles distant on l. Small villages dotted about. Plainunder crop of spring wheat. ¦Road 20 ft. wide, sandy, and for the most part in good condition.

171¼ **Kuang-tsai,** village near Mao-ts'un railway station.

171½ **Kuang-chên.**

172½ Hill 50 ft. high on l.

172¾ **Ta-shan** (40 mud huts).

173¼ Combined bridge and lock over small stream. Hill 50 ft. high, ½ mile on r.

174 **Pao-chêng.** Irregular hills, 100 to 200 ft. high, ¾ mile on r., and others 2 or 3 miles on l., both trending SW. Telegraph ¾ mile distant on l.

176 **Pa-li-t'un** (100 houses), on l. Hills here 1 mile distant on l.

177½ **Kao-t'ou-pei** (or Wang-chêng ?), 150 houses ; ¼ mile farther the outer embankment of old Yellow River, 30 ft. broad, is crossed, after which follows a flat belt 600 or 700 yds. wide, with **Pa-tzŭ-chieh,** a sort of N. suburb on S. side of it.

178½ Leave Pa-tzŭ-chieh across belt of cultivation lying in the old bed of the *Yellow River*. Barracks on E. near E. bank of river-bed.

179 **SÜCHOWFU,** P. T. RS. (see *Gazetteer*). The city has a double wall : the outer one, evidently built as a barrier against the Yellow River, now serves as an extra defence against robbers. It is of mud, and faced with stone from the NW. corner to the SE., where it used to form an embankment to the *Yellow River*. The inner wall is of stone on the north side, brick and stone on the remainder. The railway station is on the opposite bank of the old river-bed.

179½ Route ends at *North Gate* of the city.

(B) Via Tsingkow and Ichowfu (about 176 miles)

Most of the way this route is identical with Route 31 A, except that it avoids the detour via Kanyü and shortens the journey by some 3 miles. Route 31 A is left at Tsingkow and rejoined at Hsin-chi. In the intervening section the road is bad, with many deep holes. In fair weather it is utilized by wheelbarrows and donkeys; after rain it becomes almost impassable. General direction W., then NW. Villages very poor and mostly in ruins. The country is a rolling plain, planted chiefly with black beans and cotton. Route crosses several streams all flowing S., broad but nowhere 3 ft. deep, and fordable.

li	miles (approx.)	
0	0	**Sinpuchen,** P. (port of **Haichow**). For details up to mile 19½ see Route 30 A.
65	19½	**TSINGKOW,** P. T. (see *Gazetteer*). Route leaves by SW. Gate, and crosses river outside the gate by ferry. Forward bearing 280°.
75	22½	**Shih-li-p'u.** Forward bearing 265°.
80	24	**Ta-hsü-ho.**
88	26½	**Chü-fên-tien.** Forward bearing 260°.
103	31	**Hsing-tou** (presumably Hsiang-tou of the German map). Before reaching this village route crosses stream flowing S.
106	31¾	Route crosses stream flowing S.
116	34¾	Route crosses another stream flowing S.
128	38½	**Hsin-chi** (or Hsin-chi-tzŭ). Route crosses stream just below the village and rejoins Route 31 A.

(C) Via Tsingkiangpu (about 204 miles)

The route comprises 2 sections:

(1) *Haichow to Tsingkiangpu* (79½ miles). (For details see Route 28 B.)

(2) *Tsingkiangpu to Süchowfu* (124½ miles). (For details see Route 33 A.)

ROUTE 32

TSINGKIANGPU TO ICHOWFU (SHANTUNG)

Authorities: Richthofen, vol. ii, March, 1869; Gandar, *Canal Impérial*, 1894; North China Route Book, 1901–4; German map of Chihli and Shantung, 1907; War Office MS. maps of North Kiangsu.

General direction NNW. There are two alternative routes:

(A) Via Sutsien (470 li = 142¼ miles)[1]

General direction NNW. This is the main trade route. Goods coming by the Grand Canal from Chinkiang are unloaded at Tsingkiangpu and generally transported farther N. by this road, at all events for some distance (to avoid the difficult locks above Tsingkiangpu). The road lies mostly in the plain; the chief gradient is a few miles beyond Sutsien. Soil mainly alluvial and well cultivated.

li	miles (approx.)	
0	0	**TSINGKIANGPU,** P. T. RS. (see *Gazetteer*). Route leaves the stone lock bridge over the *Grand Canal* outside the *East Gate*, and proceeds N. leaving the town by the *North Gate* in the mud wall. Thence it lies across an open plain, and leaving the barracks of 3,000 men of the Lu Chün on l., crosses the old bed of the Yellow River. The bed is sandy, fairly level, and about ¾ mile wide. In the centre a stream runs through a channel about 200 yds. wide and 12 ft. deep. It is crossed by a footbridge. The high embankments of the Yellow River are still standing.

[1] The distances in *li* are those given by Gandar from Chinese sources. Distances in miles have been measured on maps. They can only be considered approximate, but, on the whole, they seemed more probable than those indicated in the North China Route Book. The latter gives the following distances: Tsingkiangpu to Shun-ho-chi (Sutsien) 48 miles; Shun-ho-chi to Ssŭ-wu 21 miles; Ssŭ-wu to Hung-hua-pu 18 miles; Hung-hua-pu to Tancheng 3 miles; Tancheng to Shih-li-p'u, 13½ miles; Shih-li-p'u to Likiachwang, 12 miles; Likiachwang to Ichowfu, 10½ miles; total distance, 126 miles.

i	miles (approx.)	
	2	**Wangying,** P., walled market town of 400 houses. Pack-animals and conveyances can be hired here for all parts. Within the town route turns W. and leaves by the W. Gate. The road through the N. Gate leads to Haichow (see Route 28 B).
	3½	**Sipa,** P. RS. (100 houses), salt dépôt. Route crosses the *Yen Ho* (No. 1) at NE. end of town.
	4	Route crosses embankment of Yen Ho (No. 1). General direction NW. For the first 6 miles route lies along sandy soil, then enters a fertile and well-cultivated plain.
40	12	**Yükow Ku,** P., walled town. Route enters by E. Gate and leaves again at NW. corner of mud wall. General direction W. Road again draws near to Grand Canal.
	19	**Lai-an-chi.**
70	21	From this point onward road partly on bank of Grand Canal (20 to 30 yds. wide), partly on the neighbouring plain.
80	24	**Chunghing,** P. T., on the E. bank of Grand Canal (cf. Route 19, sect. 2, mile 33).
	30	**Shih-chi.**
140	42	**Yanghwatsi,** P., near Grand Canal. Route crosses the *Liu-t'ang Ho*, a creek going from **Liu-lao-chien** (on the Grand Canal) to Wu-chang-ho (on Yen Ho, No. 1) : see Route 28 A, mile 37¾.
200[1]	56	**SUTSIEN,** P. T., the main town on W. bank of Grand Canal. The route is through a suburb on E. bank called **Shun-ho-chi.** Beyond the town the route lies across the dry bed of the *Liu-t'ang Ho*. There are remains of

[1] These distances are given by Gandar from Chinese sources; judging from the maps they appear considerably over-estimated.

li	miles (approx.)	
		a great brick and stone bridge, by which the road formerly crossed the river. Beyond the bridge, road rises 160 ft., passing over spur of *Ch'ang Shan* (a hill 250 ft. from which a fine view is obtained).
	60	**Lung-t'ing-pu.**
	64	**Hsiao-tien-chi.**
	68	**Ch'ang-shan-pu,** village. Route lies again in the plain.
	69	**Hsiao-ho.**
	71½	**Ch'iao-pei.**
260	74	**Ssŭ-wu,** village.
	81	**T'ang-chia-tien.**
305	87½	**Liu-ma-chuang,** village.
313	90	Border of the province of Shantung.
320	92	**Hung-hua-pu,** first village in Shantung. Road rises slightly.
	107	**Tancheng,** P. T., small town. It has a bad reputation for smugglers and brigands.
380	110	**Shih-li-p'u,** village.
	115½	**Ta-pu.** An alternative road branches off to r. and passes through a hilly district. Present route continues on the plain, skirting the foot of hills on r.
	118	**Ma-t'ou.**
	120¾	**Sha-t'un.** Hills recede to E.
	123	**Kua-p'u.**
	124½	**Chu-kuo-tien.**
	125¼	**Chieh-p'u.**
	126½	Alternative route rejoins main road.
425	127¼	**Likiachwang,** P. Route turns E. and crosses the *Yi Ho*, a river from 200 to 400 ft. wide and 3 to 6 ft. deep, which flows S. into the Grand Canal (see Route 19, sect. 2, mile 88). Beyond the Yi Ho the road forks ; branch to r. runs almost parallel to the r. bank of the

li	miles (approx.)	
		Yi Ho all the way to Ichowfu. The present route continues in an easterly direction.
	129½	Route bends NW.
	132¼	**Hsiao-li-chia-chuang.**
	136	**Kao-chia-chuang.** Direction N.
	138	**Shih-li-p'u.** Alternative route rejoins main road.
	139½	Road bends NNW.
	140½	**Nan-yen.**
	141¼	**Wan-tsun.** Several roads meet here. Shortest route turns N. and passes through an extensive suburb.
470	142¼	**ICHOWFU,** P. T., a poor city (estimated pop., 80,000) situated in a plain bordered on NNW. by high rocky mountains. Houses mostly thatched. Large trade in pigs and donkeys. Coal mines in the neighbourhood. Several important trade routes meet here. Germany held a concession from the Chinese Government for building a railway from Kaomi (near Kiaochow) to Hanchwang (on Grand Canal) via Ichowfu and Yihsien (see railway No. XVIII). Route ends at S. Gate of city.

(B) Via Haichow (155¼ miles)

This route comprises the following sections :

(1) *Tsingkiangpu to Haichow* (79½ miles)

(For details see Route 28 B.)

(2) *Haichow to Ichowfu* (75¾ miles)

(For details see Route 31 A, sect. 1 and 2.)

ROUTE 33

TSINGKIANGPU TO SÜCHOWFU

Authorities: Shantung, War Office Map, 1905; War Office MS. maps of N. Kiangsu.

General direction NW. Tsingkiangpu and Süchowfu are being connected by a railway (for details see Chap. IX, railway No. X).

In addition to the railway there are three alternative routes.

(A) Land Route via Chiu-p'ei-chou (about 124½ miles)

As far as Sutsien this route is identical with Route 32 A. Opposite Sutsien it crosses the *Grand Canal*, follows along N. embankment of the old bed of the Yellow River, as far as Chiu-p'ei-chou, then continues NW. across the plain.

miles (approx.)	
0	**TSINGKIANGPU,** P. T. RS. (see *Gazetteer*). Route leaves the stone lock bridge over the *Grand Canal* outside the *East Gate* and proceeds N., leaving the town by the *North Gate*.
	For details up to mile 56 see Route 32 A.
56	**SUTSIEN,** P. T. The main town on W. bank of Grand Canal is entered after crossing the canal.
	Main route to Ichowfu leaves E. bank, turning away NNE. (see Route 32 A).
	General direction NW. Road along the N. embankment of the Yellow River, which for the first 13 miles runs almost parallel to W. bank of Grand Canal.
69	**Tsaoho Ku,** P. Route continues along embankment, which here bends W., away from Grand Canal. Alternative Route B branches off to N.
76	Road from Yaowan (10 miles N.) to Suining Ku (12 miles S.) crosses the present route.
81	**Chiu-p'ei-chou.**

miles (approx.)	
83	Route leaves embankment, turns N. for 1 mile.
84	Road branches off NW.
89	A road from Tushan (5 miles N.) crosses route and goes to Ch'ên-chi (7 miles S.).
90	**Liu-chi-chuang,** on l.
92	**Chan-chêng-chi.**
97½	**Shun-ho-chi.** A road to l. passes the *Yang-chia Hu* and continues to Li-chi (5 miles S.).
101	**Tan-chi.** Roads branch off N. and S.
103¼	Road N.–S. crosses route.
107	**Kang-shang-chi.**
112½	**Wei-chi.**
116½	Route again crosses embankment of Yellow River.
118	**Chao-chi,** a village situated in the old bed of the Yellow River.
119	Route recrosses embankment.
124½	**Süchowfu,** P. T. RS. (see *Gazetteer*). Before entering the city route crosses the old bed of the Yellow River.

(B) Land Route via Yaowan (133 miles)

0	**TSINGKIANGPU,** P. T. RS. For details up to mile 69 see Route A.
69	**Tsaoho Ku,** P. Route leaves embankment of Yellow River and follows W. bank of *Grand Canal.*
81	**Yaowan,** P. T. Route leaves Grand Canal and turns off due W.
94	**Tu-sao.**
103	**Pa-hsia.**
111¼	**Tso-chuang.**
118½	**Ta-miao.**
130½	Route crosses old bed of *Yellow River.*
133	**SÜCHOWFU,** P. T. RS. (see *Gazetteer*). Important railway junction on the Tientsin–Pukow and Kaifeng–Tsingkiangpu lines.

(C) Water and Land Route (about 140 miles)

This route is by the *Grand Canal* as far as **Yaowan,** thence by land as in Route B.

miles (approx.)	
0	**TSINGKIANGPU,** P. T. RS. Route leaves from first lock outside the *East Gate* by the *Grand Canal.* For details to mile 88 see Route 19, sect. 2.
88	**Yaowan,** P. T., town on left bank. From here the route is by land. (For details see Route B.)
140	**SÜCHOWFU,** P. T. RS.

ROUTE 34

SÜCHOWFU TO LINHWAIKWAN (ANHWEI) (about 116¾ miles)

Authorities: French Map, 1901; Official Survey of Tientsin—Pukow Railway, 1908; W. Lewisohn, 1910.

General direction S. The two towns are connected by the Tientsin–Pukow Ry. Distance by rail 117½ miles. (For details see Chap. IX, railway No. VI.)

The present route lies along the main trade road connecting Peking with Nanking. It is everywhere passable for carts. Only the first 20½ miles lie in Kiangsu, the rest in the province of Anhwei. Most of the way it keeps within short distance of the railway. From mile 6¾ to mile 41½, the road is flanked by hills on either side. Elsewhere it passes through perfectly flat country, fertile and well cultivated, but liable to be flooded during the rainy season.

Floods render the road impassable, but do not interfere with the railway, the track of which has been laid on a high embankment.

Between Kuchen An and Linhwaikwan the Kuei Ho provides an alternative water route, but navigation on this river is difficult on account of shifting sand-banks, and the journey

is considerably longer than by road, even when the Nan Hu, a short cut between the Kuei Ho and Linhwaikwan, has sufficient water for the passage of boats. Otherwise boats have to follow down the Kuei Ho to its mouth, near Wuhohsien, and then turning at sharp angle ascend the Huai River to Linhwaikwan.

miles	
0	**SÜCHOWFU,** P. T. RS. (see *Gazetteer*). Starting from South Gate of city, route passes through extensive suburb. Direction S. then SSE.
2¼	**Cha-chuang.**
2½	Route turns again S. and joins main road, which crosses to l. of railway and ½ mile farther again to r. of railway.
3¼	**Shih-li-p'u,** on l. Direction SSW.
5½	**Tai-shan,** on r. Direction SE. ; road continues to wind.
6¼	**Li-p'u.** Ranges of hills again draw nearer to road both on E. and W. Distance to foot of hills about 1¼ miles.
6¾	**Chien-li-p'u.**
7¾	**Hsin-chuang.**
8	Road crosses to l. of railway.
9½	**San-p'u,** RS. The station is about ½ mile SW. The road draws near the range of hills which border it on l.
12½	**Chi-p'u** (?).
14	**San-li-wan.** Low hill ½ mile away on r.
15¼	**T'ao-shan-p'u,** large village. Direction SW.
18	Road crosses to r. of railway.
18¼	**Hu-hsing-chuang.** Road approaches range of hills on W. and passes between them and two isolated hills on E.
19½	**Tsao-chêng,** on r. Road turns S.
20½	Road crosses the Kiangsu-Anhwei boundary.
21	Road crosses to l. of railway. *Ming-tse* tombs(?) on r.
21½	**Tsao-ts'un,** RS. Temple to W. of railway station.

miles	
22½	**Hu-pai** on l., large temple on r. of road. Direction SSW.
23½	Road approaches and follows railway line, crossing first to r. of it after ¾ mile, and again to l. ½ mile farther on. Road and railway skirt foot-hills on r.
26	**Ch'ien-chuang** on the r., between road and railway.
28¼	**Chia-kou,** RS. about 300 yds. to W. The village is situated on the road ¼ mile farther on. Several villages to r. in the vicinity of the railway station.
29¼	Road passes at foot of hill on l.
30½	**Ch'i-li-chao** (?). Hills close in on r.
31½	**Li-shan-p'u.**
32¾	Road turns S. along foot of hills on l.
34¾	**Chên-chu.**
35¼	**Shih-san-chi.**
36¾	**San-shan-chi.** Road crosses spur of hill extending from E.
37¾	**Wang-to-chao.** Road bends SE.
38¾	**Chou-chi-tsai.** Road bends S.
39½	Railway station (Fulitsi) 1 mile away on W. Road winds and approaches railway.
41	**Sha-wei.** Road crosses to r. of railway.
41½	**Fulitsi,** P. T. RS. Railway station 1¾ to N.
43	**Ta-wang-chuang,** about 500 yds. away on l.
43¾	**K'ai-hua-kou.**
44	**Shih-li-p'u.**
44¾	**Hsü-cha.**
46¼	**Lao-wan-yin,** ¼ mile on l.
47¼	**So-an-cha.**
48	**SUCHOW AN** (Nan-hsü-chou), P. T. RS., a walled city. Railway station ½ mile E. of city wall. Road enters N. Gate. Between Suchow An and Jên-ch'iao an alternative route, via Tatien An, P., can be followed. It is about 4 miles longer to the E. of the present route.
48½	Road leaves SE. corner of city. Direction E.

miles	
49	Road crosses to l. of railway.
49¼	Road bends SE.
50½	**Hai-cha.**
52¾	Railway 1¾ miles to r. of road.
57½	**Wang-cha**[1]**.**
59¼	**Chung-cha** (?), village ¼ mile on r. of road. **Hsi-shih-p'u** railway station is about 2 miles on r.
62¼	**Hsia-ti-chi** (?).
63¼	**Wang-cha,** village ¼ mile on r. Temple to W. of village.
64½	**Huo-chêng** (?).
65	Temple 600 yds. to r.
66¼	**Chu-cho** (?).
69¼	**Chang-cha** (?).
70	**Jên-ch'iao,** RS. Station 2¼ miles to W. of village.
70½	**Tien-chao.**
73¾	**Sha-chao-tsê-hsu** (?).
74¾	**Wong-cho** (?), on l.
75½	**Sung-cho** (?), on l.
76½	**Li-shih-p'u,** on l.
77¼	**Wong-cha.**
80	**Kuchen An,** P. RS. Road enters NW. corner of town. Railway station ¼ mile W. On leaving the town route crosses the Kuei Ho (20 ft. deep) by a ferry. Railway bridge about ¼ mile to SW. The Kuei Ho runs SE. into the Huai River, and is navigable to some extent.
81½	**Chien-tai.** Beyond the village road bifurcates. The l. branch is about 2½ miles shorter and passes through Lien-ch'êng (11 miles from Kuchen An). The present route follows the r. branch.
82½	**Tung-lo-wan** (?). Before reaching the village road crosses to r. of railway.

[1] According to the Railway Survey the name *Wang-cha* or Wong-cha (Wong-cho) occurs no less than four times within the next 20 miles. In this route the names of small villages are often uncertain.

miles	
84	**Ying-chia-an** (?).
86¾	**Yen-chia-hu,** village ½ mile to r.
88¼	**Ch'ien-chia** (Zen-chia) (?).
89	Route crosses the *Hsien Ho*, a shallow creek about ¼ mile wide.
89½	**Hsin-ch'iao,** RS. The station is about ¾ mile ESE.
91	Railway passes to r. of road, skirting *Chu-chia-miao*, turns away S. to Pengpu, where it crosses the Huai River on an important bridge, and does not meet the road again until Linhwaikwan.
91½	*Yang-cho-miao* (?).
93½	**Sio-kuo-cho,** village ½ mile away on r.
99¼	The two roads from Chien-tai meet again.
101	**Wang-chuang.**
108	Village on l.
109¼	**San-p'u.**
111	Lagoon ¾ mile on r.
112½	**Ei-p'u** (?). Flood bank to r. of village.
113¼	Another lagoon ½ mile on r.
115¼	**Yo-chi-shan.** Road crosses a shallow creek running off the Huai Ho.
	Road from Tung-yeh-miao (1 mile) joins on l.
116½	**LINHWAIKWAN,** P. T. RS., a town and likin station of some importance, on both banks of the Huai River. It is the port and railway station of **Fengyang,** P. T., and is in direct water communication with the Grand Canal (see Route 35).
116¾	N. bank of Huai River. The railway station is on the S. bank.

ROUTE 35

LINHWAIKWAN (ANHWEI) TO TSINGKIANGPU (about 150 miles)

Authorities: F. G. Turner, Oct. 1905; G. E. Pereira, Jan.–Feb. 1908; Map of the Rivers, Lakes, and Canals of N. Kiangsu and N. Anhui, Survey Students of N. Kiangsu, Oct. 1911; China, Marit. Customs, Trade Reports, 1914; China Year Book, 1914.

General direction NE. This water route is by the *Huai River* and the *Hung-tsê Hu*; the former is embanked part of the way and often in floods; the latter is a large shallow lake (average depth $2\frac{1}{2}$ to $3\frac{1}{2}$ ft.) intersected by narrow winding channels, which discover themselves in winter. It is shallowest in its western parts. The bottom is mud. The lake discharges into the *Grand Canal* mainly at Matowchen Ku, the surplus water flowing southwards into the lakes *Paoying* and *Kaoyu*. There are many fishing-boats on all these lakes.

Hills end at Lao-tzŭ-shan, running from this point S. The coast from this point is low-lying, and invisible from parts of the lake. In a severe winter the latter may freeze, January being the most likely month for this to occur. Wheelbarrows can then cross from Chiang-pa (Chiang-chia-pa) to Lao-tzŭ-shan.

There is a land route from Süyi to Tsingkiangpu via Chih-t'ou-ch'iao, Kao-ch'iao, Chiang-pa, Kao-chien, distance about 60 miles—no details available.

In summer, or when there is sufficient water, an alternative water route can be followed via Chiang-pa, the Paoying Lake, and the Kaoyu Lake, reaching the Grand Canal at Kaoyuchow, or 10 miles farther N. at Ma-p'êng-wan, or 3 miles farther N. still, at Liu-man-cha (see Route 19, sect. 1)—no details of these routes available.

Chairs, horses, coolies, or wheelbarrows can be hired at Süyi.

On January 30, 1914, the Chinese Government entered into

an agreement with the American Red Cross Society in virtue of which the latter is empowered to raise a loan of £4,000,000 for the purpose of undertaking conservancy work in the Huai River. It is therefore possible that the conditions of navigation along this route may be much improved. Even under present conditions boats of as much as 30 tons capacity, known as hsiao-fan-ch'uan, constantly do the journey to the Grand Canal. A regular service of steam-launches has been established between Linhwaikwan and Matowchen Ku by a Chinese company. These launches tow a number of boats, and usually call at Wuhohsien, Süyi, and Lao-tzŭ-shan.

This route comprises 2 sections.

(1) *Linhwaikwan to Süyi* (about 78½ miles)

Distances measured on the map.

miles (approx.)	
0	**LINHWAIKWAN,** P. T. RS., a town and likin station of some importance on both banks of the *Huai River*. Railway station on S. bank at W. end of town Direction NNE.
¾	**Yen-wang-miao,** on r. Embankments begin here on both sides of the river.
2½	**Yin-chia-wan,** on r.
3	**Lan-kao-kou,** on l.
3¼	**Ho-shang-an,** on r. **Kuo-chia-yao,** on opposite bank.
4	**Huang-chia-wan,** on r. **Kuo-fu,** on opposite bank.
4¾	**San-ch'ê-kou,** on l.
5½	**Fei-chia-wei,** on l. Embankment ceases on r. bank.
6	**Chang-chia-wei,** on l. The river bends E.
6½	**Wu-chia-yao,** on r.
7	**Mao-t'an-tzŭ,** on l.
7¼	**T'ang-chia-t'ai-tzŭ,** on l. **Liu-kou-t'ung-hou-ho,** on opposite bank. Embankment on r. bank begins again.
8	**Chuang-chia-t'ai-tzŭ,** on l. River bends NE.
8¼	Embankment ceases on r. bank for ¾ mile.
9	**Lao-kuan-chi,** on r. Embankment on r. bank begins again.

miles (approx.)	
9¼	**Chang-chia-wan,** on r.
11¼	**Chang-chia-kou,** on l. **Chü-chia-wan,** on opposite bank. River bends sharply SE.
11½	**Chang-chia-chuang,** on l.
13½	Embankment ends here on both sides of river ; the latter bends ENE.
14¼	**An-t'ing,** on l.
15	**Lan-chi,** on l. **Tsao-hsiang-chi,** on opposite bank.
15½	Sandy deposit in middle of river, ¾ mile long, under water at flood-time.
16¼	**Wang-chia-ying,** on r.
16¾	**Huang-chia-tsui,** on r.
19¼	**Hsiao-ch'i-chi,** on r. at the mouth of a wide creek. River bends N.
21	**Shih-chia-lao-shan,** on r. Embankments begin again on both sides.
21½	**Hsia-miao-tzŭ,** on r.
23	**Liang-ho-pa,** on l. Embankment ends on l.
23¾	**Wai-ho-k'ou,** on r. Embankment ends on r.
24	**Wang-t'ai-tzŭ,** on r.
25	**Fêng-lai-chieh,** at the mouth of the *Kuei Ho* and the *Chung Ho* (T'ung Ho ?).
	Wuhohsien, P. The city is some distance on l. between the two rivers.
26	River bends E. and enters low-lying and marshy ground.
29	River bends NE.
30½	River bends SE.
33	River bends ENE.
36	**Fou-shan.** River divides into two main branches which finally meet again at mile 64. They enclose a large island (*Ta-liu-hang*) of swampy ground intersected at intervals by cross creeks which connect the two main branches. The present route follows the N. branch. Direction N.
41½	Small island, ¾ mile long, in middle of channel.

miles (approx.)	
	Fêng-shan, on l.
43	Direction W. Side branches continue N., forming various large islands.
44	**Hsi-fên-shan,** on l. at end of side-creek.
44¾	**Shuang-kou,** on l. Cross creek joins in on r.
45¼	**Tung-fên-shan,** on l.
48½	River bends S. **Chi-chia-tsui,** 1 mile away NE.
52	River about 1 mile broad.
53½	A cross creek joins in on r. coming from **Wu-kou** 4 miles away SW. **T'ang-chuang-tsui** is about 2 miles E.
55	**Miao-wan,** on l. Channel now over 3 miles broad.
59	*Tung-yüeh-miao*, a temple, 3¼ miles SW. near the mouth of the Ch'ih Ho, on the S. branch of the Huai River (see Route 37 A, mile 64½).
60	Sand-banks and shallows along N. bank extend as far as Hung-tsê Lake. **San-ch'ên-hu** 3 miles SW.
62	*Hua-yüan-tsui*, a small island on l. On the r. a double channel runs in from **Chiu-hsien.**
62½	*Pi-min-shan*, a small island on l.
64	S. branch of the Huai River after widening into a lake (*Mao-êrh Hu*) meets again N. branch.
65	Small promontory on r. Navigable channel along S. bank which forms a succession of bays and small lakes.
68	**San-kuan-miao,** on r. River some 5 or 6 miles wide.
69½	**Ta-shih-shan,** on r. *Huang-kang* and *Wa-yao-kang*, a large island, on l. **Ch'ên-tsui,** village beyond the island on opposite bank of the river.
71¼	*Hua-yen-an*, temple on r.
72½	Promontory on r. **T'ai-p'ing-chi,** on opposite bank, 6 miles NW.
75	*Ch'ing-shui-pa*, on r. at the mouth of a creek.
77½	**Pao-chi-shan,** on r.
78½	**Süyi,** on r.

From Süyi a land route goes SE. via Tienchang (43½ miles) to Yangchow (85½ miles). Another route goes SSE. to Luho (about 52 miles).

(2) *Süyi to Tsingkiangpu* (about 71½ miles)

miles	
78½	**Süyi.** Route is from inner harbour, NNE. for first 9½ miles, and from 100 yds. to ¾ mile from the r. bank. *Huai River*, about 3 miles wide, with low-lying bank on l. and bordered by bare grassy hills, 50 to 100 ft. high, on r. bank. Channel broken up by low-lying islands. River 10 ft. deep at starting, within 100 yds. of r. bank.
79¼	Low narrow island with reeds and some young willows, 300 yds. from r. bank. Route is to E. of island.
79¾	A temple on hill to r.
80¼	First island ends, and another about 1,000 yds. from r. bank begins. At 20 yds. from r. bank depth of river 12 ft., decreasing to 4 or 5 ft. farther out.
80¾	**San-chan-tzŭ** (4 houses), between hills on r. River 11 ft. deep 30 yds. from r. bank.
82	Hill ends. Marshy on r.
82½	**Ssŭ-shan-tzŭ** (25 houses), 200 yds. from r. bank. River opposite it 4 to 6 ft. deep.
83¼	Hills again gradually approach r. bank.
84½	**Pa-wang-ch'êng** (20 houses), with small temple on 100-ft. hill above it.
85	River 6 ft. deep 200 yds. from r. bank, which recedes, forming a bay.
86¾	Island to l. (¾ mile distant, and 1½ miles from r. bank) ends. River here 2 to 2½ ft. deep.
88	*Kuei-shan-tzŭ*, a temple on side of 100-ft. hill forming a promontory on r. bank. Here the Hung-tsê Lake really begins. The last villages visible on l. are about 4 miles distant, whilst the low-lying banks

miles

recede to the NNW. for another 2 or 3 miles and then apparently end. Bare grass hills, 50 to 100 ft., continue near E. coast, with small villages at intervals.

88½ **Hui-kou-tzŭ,** 50 houses, in a small bay.

89 Temple near E. shore.

90 Water 3½ ft. deep 200 yds. from shore.

95 Water 2 ft. 1 in. deep ¾ mile from E. shore.

98 Water 2 ft. 1 in. deep ¾ mile from E. shore.

99 **Lao-tzŭ-shan.** Hill, 50 ft. high, at end of small promontory, with village of 270 houses and a good harbour against the prevailing NE. wind. It is in Kiangsu province, the Anhwei boundary being 2 miles to the S. There is a conspicuous temple at the end of the promontory.

The only place visible on the N. coast of the lake is **Shang-yi-tsui,** said to be 10 miles distant, and nearly due north of Lao-tzŭ-shan. The *Ch'êng-tzŭ River* is said to flow into the lake to the E. of it. The only place visible on the W. is **Liu-chia-tsui** to the WSW. Between it and Shang-yi-tsui the lake recedes to NW.; this part being called the *Li Ho*, probably because a river of that name flows into it. A road leads from Lao-tzŭ-shan to Chiang-pa. It is said to go via Ch'i-chia-wa, 10 li; Ma-lang-kang, 20 li; Yü-chia-ma-t'ou (no houses), 30 li; Chiang-pa, 50 li or about 16⅔ miles.

NNW. from Lao-tzŭ-shan the promontory is surrounded by 50-ft. cliffs, with the village principally on lower ground, which even in floods is not submerged. Rounding the promontory, the direction is due E. towards Chou-ch'iao on the E. side of the lake. At first the land recedes to SSE. for about 1½ to 2 miles, and then runs ENE. to Ma-kang-tsui. Slightly rising ground, probably an embankment, along coast up to Ma-kang-tsui, with some small villages near coast.

101¼ **Chang-chia-tsui** (10 houses).

miles

103 **Ma-kang-tsui** (four or five houses), at end of promontory. Direction of coast-line SSE. Lake forms great bay, approximately 13 miles long and 11 wide, to Chou-ch'iao on the E. coast. Chiang-pa, where one or more of the dams open into the Kao-yu lake, is reported to be at the southern end of this bay, the western side of which is bare of villages and trees. They begin again from southern end of bay and continue round eastern side of lake. Shore, low-lying. Water everywhere shallow ; 3 ft. 5 in. deep near Ma-kang-tsui, 3 ft. 11 in. and 3 ft. 10 in. half-way across bay ; and in many places only 2 ft. 11 in. or 3 ft. 1 in. Bottom muddy.

114 **Chou-ch'iao,** village at the mouth of the *Ts'ao-tzŭ Ho*, on E. coast, with a temple (*Huang-kang-ssŭ*) to the S. of it, about $3\frac{1}{2}$ miles distant.

Here the lake shore bends eastwards for a short way to **Ch'u-chia-wan-tzŭ** and then turns N. to **Kao-chang-chien.** The great embankment, said to extend 60 li (20 miles) along the eastern side of the lake, from Kao-liang-chien to Chiang-pa, is visible from Ch'u-chia-wan-tzŭ northwards. It is about 19 ft. high on the land side, and faced with cut stone in from 15 to 17 rows, each stone $14\frac{1}{2}$ in. thick. It is almost the same height above the low-lying, thickly populated country to the E., with sloping earth bank down to the level of it. It is 51 yds. wide at top, with roadway 11 yds. wide along the outer edge, and raised 6 ft. Used by wheelbarrows.

$120\frac{1}{4}$ **Kao-liang-chien** (pronounced locally Kao-ling-kan). Village of 150 huts, mostly on raised circular embankment surrounding an inner harbour about 200 yds. in diameter and only deep enough for small boats. It is approximately 60 li (20 miles) distant from Lao-tzŭ-shan ; the same from Chiang-pa to the S. ; 20 li from Chou-ch'iao ; and 75 li by road or 90 by river

miles

to Tsingkiangpu. Larger boats in the winter time lie about ½ mile out from the inner harbour. There is little or no water within 200 yds. of the embankment ; only a channel running into the inner harbour. Level of the country to E., which is thickly covered with villages, appears to be about the same as that of the lake. Leaving the anchorage off Kao-liang-chien, the lake on the E. becomes a mere belt of mud, 300 to 500 yds. wide, with embankment beyond. Channel distant some 400 to 600 yds. from embankment.

121 Channel between mud-banks, probably the old bed of the Huai River converted into a canal. It is 30 yds. wide, and is the chief outlet for carrying off the water of the Hung-tsê Lake to the Grand Canal.

122¼ Channel 3 and 3½ ft. deep, between banks 2 ft. 6 in. above level of water, covered with reeds. Towing possible from this point, chiefly on r. bank.

123 A place for disembarking on to the embankment.

123½ The number of rows of stone in the embankment decrease from this point from 13 or 14 to 8 or 9 opposite Shun-ho-chi. It is for the most part in good preservation. On E. of embankment, ground marshy for 400 or 500 yds., then thickly covered with villages among trees, with an occasional canal running E. and W. The embankment itself might serve for the construction of a light railway. There is as a rule a way up it at villages.

123¾ Canal 2 ft. 5 in. deep.

124¼ **Shih-wu-li-p'u,** 70 huts ; a few on embankment, but most to E. of it. Canal 3 ft. 6 in. deep.

125½ Cultivation begins on both banks, and their height above the water gradually increases up to 8 to 10 ft. off Shun-ho-chi.

126½ Canal 3 ft. deep.

127 **Lao-tui-t'u** (pronounced locally Lao-ti-t'u), 40 huts on embankment.

miles

128¼ **Shun-ho-chi,** 150 houses and huts on l. bank of canal, here 3 ft. 6 in. deep, and known as the *Shun Ho*. In the floods the Hung-tsê Lake extends up to Shun-ho-chi. Between Shun-ho-chi and Matowchen Ku there are plenty of places where access can be had to the embankment from below. On the top it is covered with grass, and would afford an excellent camping-ground along each side of the raised roadway. Occasionally clumps or single trees and a few huts are to be seen. The marshy belt, about 500 yds. wide, continues on the r., with many villages beyond it. Country about 15 ft. above river-level. Shun Ho at first about 300 yds. to l., with many villages beyond.

129½ River here leaves embankment, and remains about 1 mile distant from it at first. To l. of latter is a broad belt of cultivation, with villages beyond it.

132¾ **Kao-chia-yen** (80 houses), is chiefly to E. of embankment, and reached by a causeway and bridge. Conspicuous Kuan-ti temple on embankment. Shun Ho approximately 3 li (1 mile) to E.

137¾ **Wu-tun** (45 houses). Here embankment makes a bend NW., bearing 324° to Chiu-kêng-t'ou.

138¾ **T'ao-p'u** (6 huts). Stone facing on l. side of embankment now ends. Latter now about 30 yds. wide, with sloping banks. Small overflow canal, 10 ft. wide, 200 or 300 yds. to l. Embankments to guard against overflow to r.

140¼ **Chiu-kêng-t'ou** (60 houses). Route leaves embankment, which runs on 200 or 300 yds. and then follows along r. bank of Shun Ho.

141 Route along embankment on r. bank of Grand Canal, following it up-stream.

142 **Matowchen Ku.** About 200 houses on either side of Grand Canal, chiefly on l. bank. To W. of it the Shun Ho flows into the Grand Canal. The Shun Ho

miles	
	is 3 ft. 6 in. deep from Shun-ho-chi to Shêng-chia-chi, some 3½ miles above Matowchen Ku, and thence 3 ft. deep up to its junction with the Grand Canal, where its course is between high banks. Grand Canal, below Matowchen Ku, about 5 ft. deep.
143½	About 1½ miles below Matowchen Ku it passes under a lock bridge, and shortly after under two others : see Route 19, sect. 2.
149	**TSINGKIANGPU,** P. T. RS. (see *Gazetteer*), on the north bank of Grand Canal ; originally a suburb of the old city of **Tsingho,** situated on the south bank. There are two bridges of boats and a lock bridge to pass.
150	Jetty for steam-launches below the stone-lock bridge.

ROUTE 36

YANGCHOW TO PUKOW KU

Authorities: French Map, 1901 ; War Office MS. maps ; Admiralty Chart No. 2809, Dec. 1914.

General direction WSW. This route connects the Grand Canal with the terminus of the Tientsin–Pukow Railway, opposite Nanking. The project to build a railway from Pukow Ku to Yangchow has again been revived, but is not likely to mature in the near future. The line, if constructed, would cross the Grand Canal near Kwachow. Other railway schemes to connect Icheng and Shiherhwei with Taichow Ku have also been considered (see Chap. IX, railways Nos. XVI and XVII). The following alternative routes are available :

(A) Water Route (about 57½ miles)

By steam-launch along the Grand Canal to Kwachow and thence by steamer up the Yangtse River.

miles (approx.)	
0	**YANGCHOW,** P. T. (see *Gazetteer*). The route is from the steam-launch jetties outside the *Ch'ao-kuan Gate*, near the SE. corner of city wall.
1¼	*South Gate.* Canal turns S. away from city wall through a long suburb. (For details see Route 19, sect. 1.)
12¼	*Mouth of Grand Canal.* Direction W. (For navigation on the Yangtse River see *Yangtse Kiang Pilot.*)
57½	**PUKOW KU**, P. T. RS. Jetties of the railway steam-ferries.

(B) Land Route (about 61½ miles)

No details available. Distances, measured on War Office map, only approximate.

miles (approx.)	
0	**YANGCHOW,** P. T. Route leaves by the W. Gate and continues along the wall to the NW. corner of city. From here route turns W.
1½	**Shang-chiao.**
2¼	**Ch'i-li-tien.** Three roads meet here. The present route turns SW. Some hills to the W.
3½	**Wêng-wu-miao.**
7¼	**Yüeh-lai.**
8¼	**T'ang-ho-ch'iao.** Route bends W.
10½	**T'ung-shun-chi.**
12	**Lung-ho-chi,** ½ mile on r. Route crosses (by a bridge) a creek running S. to Icheng. Direction SW. A road continues W. to Shih-êrh-ch'a.
13	Roads branch off to r. and l.
18½	**Icheng,** a walled town. Route enters by the N. Gate. A creek leads to the Yangtse River, 1½ miles away to S. Custom-house at mouth of creek. Another creek

miles (approx.)	
	(the *San-ch'a Ho*) connects the town with the Grand Canal (see Route 19, sect. 1, mile 10¼).
	Route leaves town by the W. Gate. Direction WNW.
21½	Route crosses (by a bridge) the *Hsin Ho*, a creek flowing S. into the Yangtse River.
22	Route branches off to NW.
25½	**Êrh-shih-li-p'u.**
27¾	**San-shih-li-p'u.** Road to r. leads to T'ai-p'ing-chi.
29¾	**Ch'ên-p'u-ch'iao.**
32	**Hou-tzŭ-p'u.**
34½	**Mêng-tien.**
38	**Lin-ch'iao-p'u.**
38¾	Route crosses a branch of the *Wang-chia Ho*, a creek flowing S. into the Yangtse River.
40	**Luho,** P. The main branch of the Wang-chia Ho passes through the town, and is crossed by the present route. Direction SSW. Another road to NNW. goes to Süyi (about 52 miles) on the Hung-tsê Lake.
44	Road bends SW.
47¾	**Pei-t'ou-ch'iao.**
48½	**Kê-t'ang-chi.** Route bends SSW.
52	**P'an-ch'ên-chi.** Road turns W. and winds.
55½	**Ch'ên-chiao-chuang-shih.** Direction SSE. A road to r. leads to Hsiao-tien skirting the range of hills which runs parallel with the Yangtse River. The present route turns the E. extremity of the range.
57¾	**PUKOW KU,** P. T. RS. The old city (usually known as P'u-chên) is reached by crossing the *Ta Ho*, a navigable creek running into the Yangtse. The present route continues along the E. bank of the Ta Ho. For details see Route 37, mile 3¼.
61	N. bank of Yangtse River, opposite railway wharf.

(C) Water and Land Route (61½ miles)

An alternative water route to Icheng is along the Grand Canal to San-ch'a-ho and thence by the creek of the same

name to Icheng. Beyond the latter town Route 36 B must be followed.

miles (approx.)	
0	**YANGCHOW,** P. T. From the *Ch'ao-kuan* Gate, along the *Grand Canal.* Direction S.
4	**San-ch'a-ho** and **Yang-tzŭ-ch'iao,** villages on both banks of Grand Canal (about 150 houses). Route leaves Grand Canal by the *San-ch'a Ho,* a creek going W.
5½	Creek bends SSW.
12½	**Liang-chia-wan.**
14¾	**Hsin-ch'êng,** on r. A creek branches off to Shiherh-wei, an important government salt dépôt, 4½ miles to S., on the Yangtse River.
17	**Icheng.** Near E. Gate creek connects with moat of the town.
	From this point the route is by land.
19	*West Gate*
	For details see Route 36 B.
61½	**PUKOW KU,** P. T. RS. Route ends on N. bank of Yangtse, opposite railway wharf.

ROUTE 37

PUKOW KU TO LINHWAIKWAN (ANHWEI)

Authorities: French Map, 1901 ; Harnam Singh, Nov. 1905 ; Official Survey of Tientsin-Pukow Railway, 1908.

General direction NW. The most convenient route is by the *Tientsin–Pukow Railway.* Distance by rail, 91 miles from Pukow City, 93½ miles from wharf on Yangtse River. (For details see Chap. IX, railway No. VI.)

There are alternative land routes.

(A) Via Sankieh (98 miles)

The road followed by this route runs within a short distance of the railway all the way to Linhwaikwan. It is somewhat longer than alternative Route B and leaves the Nanking-Peking main road at Chuchow An.

Except for the first 19¼ miles this route lies entirely in the Province of Anhwei.

miles	
0	**PUKOW KU,** P. T. RS. Starting from the N. bank of the Yangtse, opposite the railway wharf, the route proceeds in a westerly direction along N. side of a creek (generally known as the *Ta Ho*), which it follows at varying distances up to mile 40. At high water the creek is navigable from Chuchow An to the Yangtse.
1¼	Road bends N. away from creek and winds to
3¼	Pukow City (usually known as P'u-chên), which it touches at NE. corner after crossing the Ta Ho. Road passes through a gap in a range of hills which runs nearly parallel to the course of the Yangtse. It follows the W. side of the Ta Ho for 1½ miles, then passes along foot of hill at a short distance from the railway.
5¾	Village. Hills to r. recede ; route follows hills on l. up to mile 13.
7¾	**Hua-chi-ying,** RS. Road crosses to l. of railway.
8¾	**An-tung-ch'iao.** Here the road passes over a small stream by a single-arch stone bridge. The road is now 6 ft. wide, and is on a bank 3 to 4 ft. high. The road continues W.
10½	**Chi-pa-ying.** Route crosses a tributary of the Ta Ho.
11½	**Hung-chao.**
13	Route crosses a branch of the Ta Ho by a good bridge of five-span stone arches. Length 50 yds. Water 60 ft. wide. The road now turns NW., and after 1 mile crosses another branch of the Ta Ho by a wooden bridge.

miles

14½ **Tung-ko,** RS., straggling village about ¾ mile long. To the N. of the road is wet low-lying country under rice cultivation, through which the railway passes on a high embankment (station 1¼ miles to NW.). To the S. is the river about 1 mile distant, and beyond the river are the low hills referred to above.

16 Railway station ½ mile away on r. of road.

17¼ **Sikoh,** P., last village in the province of Kiangsu.

19¼ Route crosses the Kiangsu–Anhwei boundary.

22½ **Wuyi An,** P. T. RS., a market town on the Ta Ho (here called Wuyi Ho). 68 boats of different sizes were seen here (1905). At that date there were 1,100 families and 140 shops. Since then the town has grown considerably, and when the railway to Sin-yangchow (now under construction) is completed it will become an important junction.

Road crosses to r. of railway near railway station.

25 Road crosses to l. of railway.

25¾ **Tan-tzŭ-chieh.**

27 **Ou-chi-yen-fêng.**

30½ Village.

32¾ Large village.

33¼ **CHUCHOW AN,** P. T. RS., city of some 5,200 families. City wall more than 3 miles in extent, provided with 6 gates. An English and American mission have stations here. Railway station close to NE. corner of city. Drinking water is obtained from a stream which runs through the city and flows into the Ta Ho near the railway station. In the city the stream is crossed by a bridge of 3 arches ; its total length is 50 yds. The water is from 20 to 30 ft. wide, and from 1 to 6 ft. deep. At high water the Ta Ho is navigable all the way to Pukow Ku. There is a range of hills (*Fêng Shan* and *Kuan Shan*) to SW. of city.

The main road from Nanking to Peking followed up to here continues W. along the foot of these hills

miles	
	(see alternative Route 37 B). The present route leaves by the N. gate. General direction NNW.
34½	Road crosses to r. of railway. Just before reaching the railway a road branches off in a NNE. direction to Pa-li-miao, situated on the opposite side of the Ta Ho.
37¼	Village. Road quite close to railway.
40	Road crosses to l. of railway.
42	Route passes at foot of hill (*Peh-mi Shan*) on l., and crosses a tributary of the Ta Ho. Railway bridge about ½ mile E.
42½	**Shahotsi,** P. RS. The station is ¼ mile E. of village.
43¼	Road crosses to r. of railway, passes a village, and recrosses to l. of railway.
43¾	Route crosses a branch of the Ta Ho. Railway bridge ¼ mile E.
44¾	Road crosses to r. of railway and passes some villages.
47¾	Route crosses another branch of the Ta Ho. Railway bridge about ¼ mile to the W.; beyond which are two isolated hills (*Liang-chia Shan* and *Hsiao-tu Shan*).
48½	**Changpalin,** P. RS. Station ¼ mile W. of village.
51	Small village.
54¾	Route crosses a small creek, and a wider branch of the same creek ¾ mile beyond.
57¼	**Sankieh,** P. RS. Just before entering the town route crosses two small creeks. Railway station 2¼ miles SW.
58	Route leaves N. end of town.
59	Route crosses a creek.
60¾	Route crosses a wide creek.
61½	Village. A small creek is crossed before reaching the village.
64½	**Kwantien An,** P. RS. Road crosses to l. of railway just N. of the station. The village is on the E. bank

miles	
	of *Ch'ih Ho*, a creek about ¼ mile wide at this point. Route crosses the creek.
65¼	A few houses on l.
67	Small hill on r.
68¼	**Ta-hsiao-chia-tang.**
69	Route crosses Ch'ih Ho again.
69¾	Village.
72	**Chao-chia-tang.** Road again close to Ch'ih Ho on l.
74	Road crosses to r. of railway.
74¼	**Mingkwang,** P. RS. Station at NW. corner of town. On leaving the town the road crosses again to l. of railway and passes close to the station.
75¾	Route crosses the Ch'ih Ho again. Railway bridge ¼ mile N. Beyond the creek road crosses to r. of railway.
78¼	Route, alongside of railway for about ½ mile, crosses small tributary of the Ch'ih Ho. The latter continues in a northerly direction, and joins the Huai River at the SW. corner of Hung-tsê Lake (see Route 35, mile 59).
79½	Road and railway recross small creek, and gradually enter rising country.
79¾	Village on l.
82¼	Village on l.
83¾	Road passes along the foot and crosses spur of *Hsi-mên Shan*, a high hill to E.
87	**Siaokiho** (Chi-ho), P. RS., a large village entered after crossing a creek. The railway station is 2¾ miles WSW. of town. General direction W.
93½	**Pan-chao.** Route rejoins the Nanking–Peking main road (see Route 37 B). Beyond the village route crosses a creek running in a northerly direction to the Huai Ho.
96	**Lin-chia-ying** (?). After leaving the village road passes through an ancient camp.

miles	
97¾	**LINHWAIKWAN,** P. T. RS., a town and likin station of some importance, on both banks of the *Huai River*. It is the port and railway station of **Fengyang,** P. T., and is in direct water-communication with the Grand Canal (see Route 35).
98	South bank of Huai River. Railway station on same bank ¾ mile W.

(B) Via Chihho (about 97 miles)

This route follows the Nanking-Peking main road all the way. It is practically the same length as Route A, but lies almost entirely through flat country. It avoids the hilly district crossed in last stages of Route A, but is more liable to be rendered impracticable through floods.

As in the case of Route 37 A the road is generally in bad repair.

No details beyond mile 37½ were available for this route. The distances, measured on French map, are only approximate.

As far as Chuchow An the route is identical with Route A.

miles	
0	**PUKOW KU.** Route starts from N. bank of Yangtse opposite railway wharf.
	For description up to mile 33¼ see Route 37 A.
33¼	**CHUCHOW AN,** P. T. RS.
34¼	Route leaves city by W. gate and follows in a westerly direction along the foot of *Fêng Shan*, a range of hills to W. of city.
35½	Route crosses the creek which flows through Chuchow An.
37½	Route crosses the creek once more and passes over the *Kuan Shan*, a range of hills running in continuation of the Fêng Shan.
40¾	**Kuan-shan.**
45¼	**Chulungkiao,** P.

miles	
47¾	**Kwangwuwei,** P.
50¼	**Ta-liu-shan.**
54¼	**Mo-p'an-ling.**
59¾	**Taishanpu,** P.
63	**Chihho,** P. Route crosses the *Ch'ih Ho,* a river which runs northwards into the Hung-tsê Hu (see Route 37 A, mile 78¼).
66	**Liu-chia.**
70	**Chungkiapu,** P.
73½	**Huang-lien-p'u.**
77	**Hungsintsi,** P.
79½	**Chang-chia-p'u.**
82½	**Huang-ni-p'u.** Direction N.
84½	**Sang-chiang.**
87½	**Tsung-p'u.**
92½	**Pan-chao.** Route A is rejoined here. For details see Route 37 A, mile 93½.
97	**LINHWAIKWAN,** P. T. RS. Route ends on S. bank of *Huai River.*

ROUTE 38

PUKOW KU TO LÜCHOWFU (ANHWEI) (109¼ miles)

Authority: Harnam Singh, Nov. 1905.

General direction W. This is an important route leading from Pukow Ku on the *Yangtse River*, opposite the capital city of Nanking. As Lüchowfu is a city of strategical value this route might form the main line of advance for an army operating towards Hankow. The road varies much in width and condition, in some places being only 6 ft. wide on a bank, while in others spreading out to 20 ft. In its present condition the only form of wheeled traffic which could be used is barrows, but it might be quickly improved so as to take field

artillery. Good water is to be found the whole way. The country is thickly populated. The chief crop is rice. Where rice cultivation exists the action of mounted branches would be much restricted, but in the hilly tracts there is greater freedom of movement. The country round Pukow Ku is hilly and affords opportunities for defensive positions.

For the first 17¼ miles the route lies along the main road to Linhwaikwan (see Route 37 A). Up to that point it is in proximity of the Tientsin-Pukow Ry. line and lies within the province of Kiangsu, beyond that point it passes into the province of Anhwei. The alignment of the Pukow-Sinyangchow Railway, now under construction, is almost identical with the present route all the way to Lüchowfu (see Chap. IX, railway No. IX).

miles	
0	**PUKOW KU,** P. T. RS. (see *Gazetteer*). Route starts from N. bank of Yangtse, opposite railway wharf. For details up to mile 17¼ see Route 37 A.
17¼	**Sikoh,** P., village of some 20 to 30 houses. Route turns SW. and enters province of Anhwei. Main road continues NW. to Linhwaikwan (see Route 37).
18¾	Embankment, about 400 yards to the S., runs parallel to the road for about 1½ miles, and gives excellent command. To the N. the country is flat. To the S. hills are visible. Small bridges over irrigation channels at miles 24¾, 25¼, 27¾, and 30¾. At mile 16¾ is a wooden bridge over a muddy tributary of the river, and another 3½ miles farther. The latter consists of three spans, stone arches.
35¾	**Chüantsiao,** P., a district town situated on the S. or r. bank of the *Ta Ho*. Leaving this place the road follows the r. bank of the stream.
39¼	**Chang-lung-kang,** a mud-walled village, near which there is a stone-arch bridge. Crossing the bridge the road continues W., and, after a mile, strikes the r.

miles	
	bank of another stream, which later joins the Ta Ho. The water of this is 10 or 12 ft. wide, and good for drinking.
41¼	**Pai-chiu-kang,** village of some 20 houses. The road continues thence in a westerly direction.
47¾	**Siaotsi An,** P., large village. General direction WNW. At mile 52½ the *Sha Ho* is crossed by ferry. This river flows from the hills, which are 16 miles distant to the S. Bed, 50 yds. wide ; water, 10 ft. width ; depth, 1 ft. 5 in. Fordable. Stone and sand bottom.
60¼	**Tashukai,** P., village of 50 houses. General direction W. by S.
63¼	30 houses. Route crosses dry bed.
64¾	**Chang-fei-chi.** Road crosses stream from hills by a stone-slab bridge. Good drinking-water.
70¼	**Lan-kan-chi** (? Nan-kang-chi), village of about 40 houses. As far as mile 85, rocky hills, 1,500 to 2,000 ft., 8 to 10 miles S.
	Direction the same. Across low, grass-covered, undulating hills, with easy slopes.
78	**Wên-chia-chi.** Rice-fields. Standing water and reeds.
84¼	**Shih-t'ang-ch'iao** (70 houses). Direction W. by S.
87¼	Stream from hills, 3 to 12 ft. wide, 2 to 3 ft. deep. Sandy bottom, crossed by slab bridge.
91¾	**Chiang-chun-tien,** small village.
97¼	**Tienfow** (Tien-pu). P. Important mart at cross-roads from Chaohsien and Fengyang.
109¼	**LÜCHOWFU,** P. T. Large and important city.

ROUTE 39

PUKOW KU TO HOCHOW AN (ANHWEI)

(about 36 miles)

Authorities: French Map, 1901; War Office MS. maps of N. Kiangsu; Admiralty Chart 2678, Feb. 1915.

General direction SW. No details available. Distances approximate only, measured on the map.

miles (approx.)	
0	**PUKOW KU,** P. T. RS. (see *Gazetteer*). Route starts from the old city (known as P'u-chên). Direction SSW., along main road.
6	**Kiangpu,** P., an ancient walled city now partly in ruins. A creek leads to the Yangtse at Chiang-wei. Route enters city by E. Gate. Main road to Linhwaikwan turns off NW. (see Route 37).
7½	Route leaves by W. Gate. Road forks. Route follows r. fork skirting hills on r.
10¼	**Wu-li-ch'iao.**
11¾	**Kao-wang-chên.** Branches of road join again.
19	**Shih-chi-shih.** Several roads meet here. Route continues SW.
22½	**Ch'i-li-ching.**
26½	**Lin-pu-yü.**
27½	Route enters province of *Anhwei*.
(?)	**Wukiang An,** P.
29	**Shih-pa-ho.**
36	**HOCHOW AN,** P. A canal connects with the Yangtse River.

ROUTE 40

SÜCHOWFU TO KAIFENG (HONAN)

(about 217 miles)

Authorities: W. Lewisohn, 1910; Military Report on Honan, 1906.

General direction WNW. The two cities are now connected by a railway (see Chap. IX, railway No. VII).

The present route is via Siayi. Apparently a somewhat shorter and possibly better road would be found via Yücheng Ho. The latter alternative has the further advantage of being all the way within a short distance of the railway.

The country is liable to be flooded, when the road often becomes impassable and numerous detours have to be made. On the whole the road is bad between Süchowfu and Kweiteh, but improves farther west. It is however passable for carts, though mainly used by wheelbarrows and pack-animals.

In Kiangsu the country near the old bed of the Yellow River is thickly populated, and appears to be particularly prosperous. Elsewhere, on the other hand, villages are fewer, generally very poor, and in a ruinous condition.

Chief products : black beans, kaoliang, and cotton.

Only about 67 miles of the present route lie in the province of Kiangsu, the rest being in Honan. As the journey was undertaken at the time of great floods distances are only approximate, especially for the Kiangsu section. In the Honan section distances agree with those of the North China Route Book, except that the latter estimates the distance from Kweiteh to Ninglinghsien at 18 miles only.

li	miles	
0	0	**SÜCHOWFU,** P. T. RS. (see *Gazetteer*). Route leaves through NW. corner of city, and after about 2 miles ascends to the old bed of the *Yellow River*, which forms an extensive plateau mostly about 50 ft. above the surrounding country.

li	miles	
25	8½	Road skirts NE. extremity of a hill running NE.–SW. Only small villages on this stage.
45	15	**Ho-chai.**
53	17¾	**Li-ssŭ.**
63	21	**Wu-chêng-chuang.**
77	26	**Ho-chi-êrh,** large village. About ¾ mile before reaching the village route leaves the old bed of the Yellow River and descends through the embankment into the neighbouring plain. Villages less numerous.
89	29¾	**Ch'ü-chi-êrh.**
114	38	**Huang-k'ou** (not to be confused with village of same name at mile 49½).
124	41½	**Hou-lou.**
132	44	**Chang-chuang.**
137	45¾	**Wang-chi-êrh,** large market village.
140	46¾	**Ma-chia-k'ou.**
148	49½	**Huang-k'ou.**
150	50	**T'ien-lou.**
170	57	**Tangshan Ku,** P.
?	68(?)	**Lo-ch'i.** First village in Honan, the provincial boundary being crossed about one mile before entering the village, or about 10 miles beyond Tangshan Ku.
238	79	**Kuo-li-chi.**
250	83	**Siayi,** P., a market town.
252	84	**Tung-kuan.** Route crosses brick bridge outside the village.
259	86½	Three-arch brick bridge over stream running S., about 30 yards wide.
265	88½	**Wang-ying,** large village with mud wall.
280	93½	**San-kuan-chi,** large village.
288	96	**Yüan-chung.**
298	99¼	Cluster of 4 small villages.
308	102¾	**Chan-chan-chi.** Junction of roads.

li	miles	
331	110½	**Kushutsi,** P., large village with mud wall. Bridge over river outside the E. gate.
342	114	**Man-chung-ch'iao,** large market village with ruined mud walls. Outside the W. gate is a five-arch brick bridge over river flowing 145°; 30 ft. wide, very shallow.
352	117¼	**Ts'ai-tao-k'ou.**
364	121	**Shih-li-p'u.**
374	124½	**KWEITEH,** P.T. RS., a prefectural city of some 6,500 families, situated in well-cultivated country. The wall is faced with brick, and is about 30 ft. high, surrounded by a large moat with water, 200 yds. (? ft.) wide. It is encircled at a distance of about ½ mile by a mud embankment, 15 ft. high. The space between it and the city wall is low-lying and not built over, with a large amount of fallow land and standing water. The roads which enter the four city gates cross the moat on mud-banks. Inside the city is well filled with houses, the buildings over the four gates being the most prominent. There are one or two large temples. Supplies, carts, and barrows procurable. Good camping-ground outside the mud embankment.
		Road leaves the city by the W. gate. Direction W.
384	128	Brick bridge over small stream.
401	133½	**Shui-shih-p'u,** town with mud wall and gates.
421	140	**Kwanyintang,** P., large market village with gates and mud walls.
428	142½	**Shih-li-p'u.**
437	148½	**Ninglinghsien,** P. RS., small district walled town, surrounded by a belt of water 3 miles broad, outside which is a mud-bank. The district is a poor one, with much saltpetre in the soil. Supplies scarce. Carts and barrows can be

li	miles	
		obtained in small quantities. Camping-grounds outside the mud-bank.
		Very few villages in this neighbourhood. Direction SW.
467	155½	**Yangyipu,** P., large village with gates and mud walls.
472	157	**Yü-ch'i-t'un.** Route crosses the *Chang-kung Ho*, a river flowing SE.
474	158	**Hsiao-lin-tien** (or Hsiao-lin-chuang ?).
477	159	**Chou-p'ing-kuan.**
487	162	**Suichow Ho,** P. RS., a departmental walled city, situated in flat country. The space inside the city walls is very devoid of houses, the city being a poor one. Business is small, and for the most part carried on in the E. suburb. The surrounding district is also poor. Supplies, carts, and barrows obtainable in limited quantities. Good camping-grounds in the vicinity.
		Direction NW.
502	167¼	**Ch'êng-kuo-t'un** (or Ch'ang-ku-t'un), village on the usually dry bed of the *Hui-chi Ho*.
507	169	**Liu-t'un-êrh.**
512	170¾	**Yüsiangpu,** P., a large walled village. Brick bridge over stream. Junction of roads at E. side.
514	171½	**T'u-kung-chia.**
521	173¼	**Tsung-wan.**
523	174	Brick bridge over canal.
529	176	**Shih-hou-p'u.**
539	179½	**Shih-li-p'u.**
546	182	**Kihsien Ho,** P. RS., a large walled district town situated on flat country, from which wheat of an excellent quality is produced. This district is the second richest in the province. Supplies, carts, and barrows plentiful. Good camping-grounds in the vicinity. Water from wells. Dike at right angles to road just outside W. suburb.

li	miles	
558	186	**Shih-li-p'u,** large village.
569	189½	**Ko-kang,** large village, junction of numerous roads.
579	193	**Hankang,** P. Market town with gates and mud walls.
585	195	**Chou-chai.**
589	196¼	**Ch'iao-lou.** A road branches off to Chê-kou.
593	197½	**Liu-lou.**
600	200	**T'ai-shan-miao.**
605	202	**Chenliu,** P. RS., a small, walled district town, situated on flat open country, only partially cultivated, as parts have been rendered barren by former inundations of the Yellow River.
613	204½	**Shih-li-p'u.**
620	206¾	**Hsi-lai-chi.**
625	208½	**T'ai-p'ing-kang,** large village.
630	210	**Wang-chia-chuang.**
633	211	**Wang-chia-t'un-êrh.** Brick bridge over canal, 20 ft. wide, just E. of this place.
635	212	**Kao-lou.**
642	214	**Man-chou-chuang.**
647	215½	**Wên-chuang.**
650	217	**KAIFENG,** P. T. RS., a large and important city, the capital of the province. Population about 200,000. It is situated on a sandy plain about 5 miles from the S. flood-bank of the Yellow River, and surrounded at a distance of about 2 miles by a large mud-bank 12 ft. high. The country between the bank and the city, on E. side, is well wooded and covered with groves ; that to N., S., and W. is more or less open. About ¾ mile to SE. of city is a massive-looking pagoda about 50 ft. high. The city walls enclose roughly a space 2 miles square. The walls, 35 ft. high, are crenellated and faced with large bricks. There are 5 gates of usual double type,

li	miles	
		with large buildings over them. There are several lakes and ponds inside the city walls. The surrounding country is at a considerably higher level than the space inside the walls, and for that reason water, once it gets into the city, lies there stagnant. The chief products of the district are wheat of fine quality (not, however, in sufficient quantities for the needs of local consumption), cotton, ground-nuts, soda, and saltpetre.

SECTION III

GAZETTEER OF CITIES AND TOWNS

NOTE

GENERALLY speaking, the cities and towns of Kiangsu are surrounded by defensible walls, of which the trace varies ; it is either circular or shaped as a fairly regular four-sided figure. The walls may be of any height from 15 to 40 ft., and of a thickness of from 10 to 20 ft. They are of rubble, faced on both sides with brick or with squared stone. They are topped by battlements, 5 to 10 ft. high and 2 to 4 ft. thick, crenellated and pierced for musketry. At irregular intervals small rectangular buttress-like projections are built out from the wall and give flanking defence. Occasionally the wall is backed by an earth bank leading by an easy slope to the top of the wall ; in other cases the top is reached by steps. Such a wall is a most formidable obstacle, being proof against the battering of all but heavy guns, and being impossible to climb without the use of ladders.

The walls of every city are pierced by four or more gates, of which the principal ones are usually named after the cardinal points of the compass They are tunnels through the wall, and may be from 6 to 12ft. high and from 5 to 12ft. wide. The passage is closed by heavy, iron-bound, wooden doors. The doors are protected against fire from the outside by a sweep of wall similar to the main wall of the city, enclosing a semi-circular to rectangular space which may be from fifty to several hundred yards each way. The entrance to this space is at one side. A similar space is occasionally found inside the gate as well as outside. The gates and the corners of city walls

are as a rule surmounted by watch-towers. The condition of the walls varies greatly. Those of the more important cities, such as Nanking and Soochow, are kept in good repair. Those of comparatively unimportant cities, such as Kunshan and Küyung, are entirely neglected and are allowed to fall into a state of dilapidation. The majority of the cities are intersected by a number of creeks passing through culverts under the walls; these are usually provided with water-gates, either of wood or iron, which can be opened and closed from inside the walls.

Outside the walls, at a distance of from 5 to 100 yds., there is generally a moat which may vary from 5 to 100 yds. in width and from 2 to 20 ft. in depth, the average dimensions being 30 yds. and 12 ft. respectively. The moat, as a rule, encloses the city almost entirely, and forms part of the surrounding waterway system, with which it has numerous connexions.

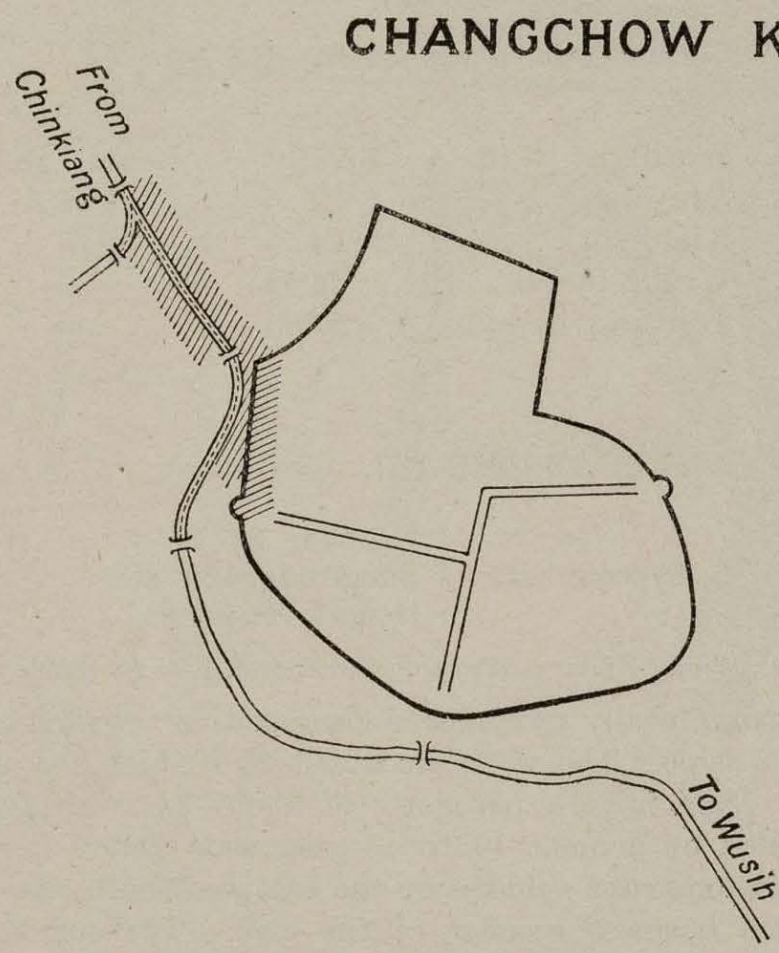
CHANGCHOW KU. (See Plan)

Approximate { Latitude, 31° 47′. Longitude, 119° 59′. Height, sea-level.

Authority: Mainly Military Report on Province of Kiangsu (South), 1909.

Changchow, locally pronounced Zang-tzeu, is an ancient city on the Grand Canal. Its walls, which date from the Ming period, are $4\frac{1}{4}$ miles in perimeter and about 25 ft. high. They are pierced by 7 gates, and surrounded by a moat 5 to 15 yds. wide and 3 to 8 ft. deep. They are further protected on the W., S., and E. sides by the waters of the canal, to which 4 sluice-gates open. The city has a busy junk traffic, and is also a mooring-place for lumber-rafts from Kiangsi. There are extensive suburbs on the east, west, and north. Its products are rice, wheat, beans, and silk.

The surrounding country is intersected by creeks and slightly undulating, but is fairly passable for infantry.



Rough Sketch Plan. Dotted lines in canals show where boats are likely to be found. Shading shows business quarter.

The Methodist Episcopal Church (Southern), U.S.A., has a station at Changchow Ku, and there are 3 men and 5 women missionaries resident. There is a post and telegraph office. The Shanghai–Nanking Railway has a station at Changchow Ku, situated about half-a-mile NE. of the city.

Distances from Changchow Ku

	miles	
To Wusih, by water	25¾	Route 1 A
Tanyang ,,	27	,, 1 A
Kiangyin ,,	24	,, 15
Wusih, by rail	24·14	—
Tanyang, by rail	27·83	—

CHANGSHU KU. (See Plan)

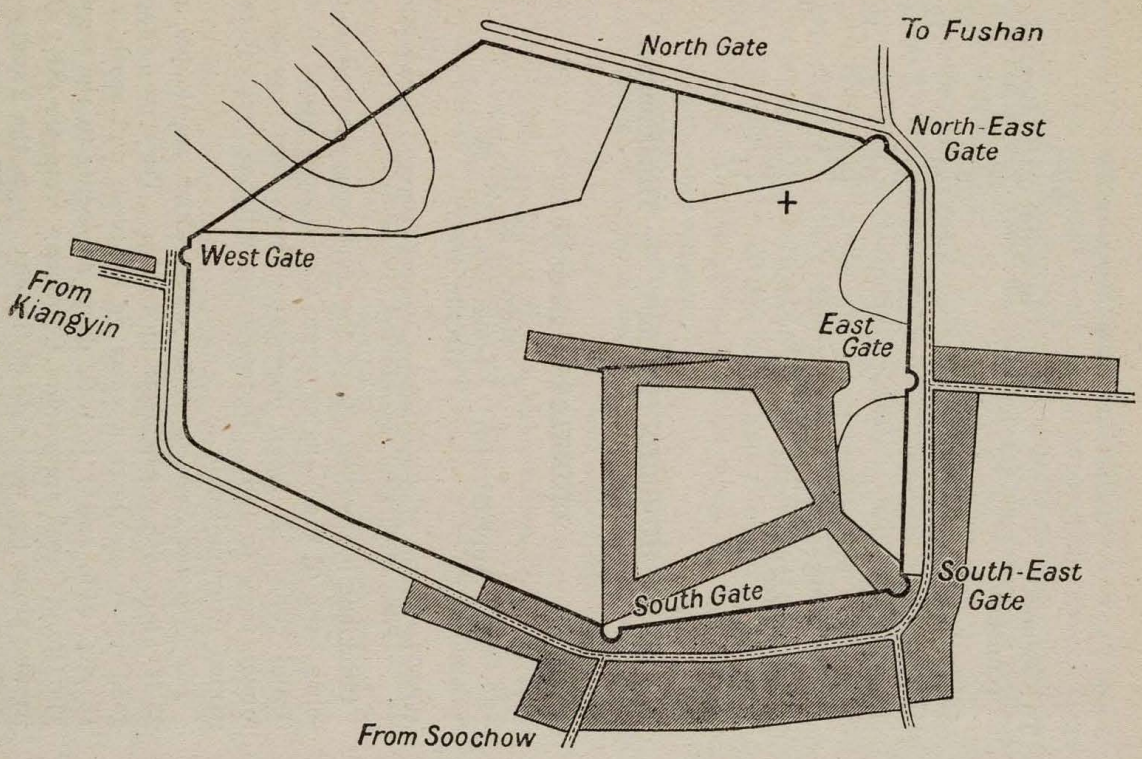
Approximate { Latitude, 31° 36′. Longitude, 120° 49′. Height, sea-level.

Authority: Mainly Military Report on Province of Kiangsu (South), 1909.

Changshu, locally pronounced Zang-zou, is a walled city of the usual type. The walls are about 20 ft. high and in fair repair. They have a perimeter of about 3½ miles and are surrounded by a moat 10 to 15 yds. wide and 6 ft. deep. There are extensive suburbs on the east and south, the latter being the business quarter of the city. The surrounding country is a flat plain intersected by numerous waterways; a range of hills, called Niu-t'ai Shan, projects into the city on the north-west, and commands the whole of its interior.

Changshu Ku is approached by water routes from Taitsang in the SE.; from Kunshan in the SSE.; from Soochow in SSW.; from Wusih in the WSW.; from Kiangyin in the NW.; and from Fushan in the N. See Routes 9–13.

There is a post and telegraph office.



Sketch Plan. Dotted lines in canals show where boats are likely to be found. Shading shows business quarters.

Distances from Changshu Ku

			miles		
To Soochow		by water	22½	Route	11
Kunshan		,,	25	,,	9 B
Wusih	via Huang-ni-tai	,,	27	,,	12 A
	via Tungting	,,	29	,,	12 B
Taitsang		,,	31¼	,,	9 A
Kiangyin		,,	40	,,	13
Shanghai	via Taitsang	,,	85¼	,,	9 A
	via Tungtangshih	,,	74½	,,	9 C
Tungtangshih		,,	10½	,,	9 C
Fushan		,,	11	,,	10

CH'ING-HO HSIEN (Tsingho); see **Tsingkiangpu.**

CHINKIANG. (Map No. 3)

Approximate { atitude, 32° 10′. Longitude, 119° 26′. Height, 100 ft.

Authorities: China, Maritime Customs, Decennial Reports; Yangtse Kiang Pilot, 1914; Imp. Japanese Rlys., Official Guide, vol. iv.

Chinkiang is a walled city of the usual type situated on the south bank of the Yangtse where the latter is joined by the Grand Canal. It is an important treaty port, opened for foreign trade in 1861. In recent times it has been officially named Tan-t'ou-hsien.

The City and Suburbs.—The walls, which are double, are 25 ft. high, with a perimeter of 4 miles. They are in fairly good repair, and have a moat on the west and south 3 to 15 yds. wide and 1 to 6 ft. deep, according to the season. The Grand Canal approaches Chinkiang from the SE., and, passing along the west side of the city, joins the Yangtse at the eastern end of the British Concession. There is, however, a small cutting through the city itself to facilitate the com-

merce of the place. The north face of the city wall approaches within a few hundred yards of the bank of the river. There is an extensive suburb outside the West Gate and a small one outside the South Gate, the former being the principal business quarter of the city.

Conspicuous objects at Chinkiang are the white buildings of the London Missionary Society, standing behind the city on an elevation near which is a pagoda ; the British Consulate, a red-brick building on the slopes of Yün-t'ai Shan, a mile west of the city ; Garlic Hill at the west end of bund, on which a white beacon has been erected ; the pagoda on Golden Island Hill, $1\frac{3}{4}$ miles west of the city ; and Consular Bluff (about 140 ft. high), a point north of the city wall, on the east slope of which are some temples.

The **population** is estimated at about 182,000.

The **British Concession** lies along the Yangtse as far as the base of Chin Shan. It is bunded for an extent of 700 yds. from the mouth of the Grand Canal, which is near the Imperial Custom-house, to Garlic Hill, a steep hill near which is the British Consulate on the slope of a hill named Yün-t'ai Shan. Along this front the hulks which form the landing-stages are moored.

The Concession and the adjacent suburb are lighted with electricity by a Chinese company, and the Concession has a supply of filtered water laid on from a water-tower.

The **landing-places** at Chinkiang are bad except at high water, and the trade of the town suffers from the changes which are always taking place in the bed of the river and from the chronic neglect of the waterway in the Grand Canal. The changing nature of the river-bed is well illustrated by the fact that Chin Shan, the famous Golden Island, is now a precipitous rocky hill on the right bank of the river. In 1823 this hill is said to have been on the left bank ; in 1842 it was in the middle of the river ; in 1862 it was joined to the right bank by a spit ; and in 1907 it was nearly 700 yds. inside the low river edge. It is probable that the hulks will all have to be moored farther down-stream at no distant date.

The chief **exports** are beans and peas, wheat flour, silk, medicines, sesamum-seed and ground-nuts. There are albumen factories, flour-mills and silk filatures.

The **shipping** returns for 1915 show that 2,013 steamships and 434 sailing ships, with a tonnage of 3,585,800 and 43,687 respectively, entered and cleared at Chinkiang.

Surrounding Country.—The surrounding country is hilly, and is fairly passable for all arms. The city is hemmed in and commanded from the land side by hills within easy artillery range. Silver Island in the river and the hills on the river-bank north-east of the city are fortified against an up-river advance. About 3 miles above Chinkiang the Grand Canal commences its course to the northward on the left bank of the Yangtse, and on the west side of the triangular island on which is the walled town of Kwachow.

Supplies.—Beef is plentiful, and there is a fair supply of mutton. Fish is abundant, vegetables and fruit are cheap, and all kinds of stores are obtainable.

Transport.—The road transport is confined to wheelbarrows, pack-animals, and porters, the roads being unfit for wheeled traffic. There are extensive facilities for canal and river transport, and the Shanghai–Nanking railway runs past Chinkiang.

The stations of the Shanghai–Nanking Railway at Chinkiang are Chinkiang Flag Station, near the south-west corner of the city, and Chinkiang Station, $2\frac{1}{2}$ miles by rail farther west Between the two stations is a tunnel 1,320 ft. long, through Fort Hill (Pao-kai Shan). A small branch-line connects Chinkiang Station with the river front east of Fisherman's Rock.

Government.—The chief official under the new régime is known as the Min-chêng-chang, and he is supposed to perform the functions of Tao-t'ai, Prefect, Magistrate, and others. Two special courts of justice were established in 1911, the Treaty Port Court and the Local Court. The former is situated outside the West Gate of the city and is intended to deal with cases arising between foreigners and Chinese. The Local Court

is inside the South Gate. Chinkiang is a military station, and it has a police force organized on modern lines.

European Residents.—There are about 80 European residents, including thirty missionaries, at Chinkiang. The British, German, French, and Austro-Hungarian consulates are in the Concession. The missions represented are the American Presbyterian Mission, Southern ; American Southern Baptist Mission ; China Inland Mission ; Methodist Episcopal Mission ; and the National Bible Society of Scotland.

Communications.—The roads round Chinkiang are unfit for wheeled transport and only usable by pack-animals and wheelbarrows. There is, however, every facility for water transport north and south on the Grand Canal, and east and west on the Yangtse. Steamers call daily, up and down stream, on the Yangtse. There is also railway communication with Shanghai and Nanking and intermediate points on the Shanghai–Nanking Railway. Besides the Chinese post and telegraph offices, there is a German and a Japanese post office at Chinkiang. A submarine cable crosses the Yangtse north and south on the west side of the Consular Bluff, the shore end being marked by a white post which is lighted at night with a red light.

Distances from Chinkiang

		miles	
To Shanghai	by water	165	
,,	by rail	150	
Nanking	by water	47	
via Kaotze	by land	42	Route 17 A
via Tanyang	,,	70	,, 17 B
Nanking	by rail	43	
Tanyang	by water	20½	Route 1 A
,,	by land	16¼	,, 17 B
Küyung	,,	43	,, 17 B
Tsingkiangpu	by water	111¼	,, 19 (1)
Yangchow	,,	14¼	,, 19 (1)
Hwaianfu	,,	102¾	,, 19 (1)

		miles		
To Hangchow	by water	206¾	Route	1 A
via Pingwang and Huchowfu	,,	211¼	,,	1 B
via Soochow and Huchowfu	,,	201½	,,	1 C
via Loshe and Huchowfu	,,	196	,,	1 D
via Shihmen Che and Changan	,,	about 201	,,	1 E
Wusih	,,	73¾	,,	1 A
Soochow	,,	104½	,,	1 A

CHWANSHA

Approximate { Latitude, 31° 11′. Longitude, 121° 43′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Chwansha, or Ch'uan-sha-t'ing (local name Ts'êng-sho-t'ing), recently officially named Ch'uan-sha-hsien, is a walled city, nearly square, the north and south faces measuring about 800 yds. each and the east and west faces 700 yds. It is surrounded by a brick wall 2 or 3 ft. thick, which varies from 20 to 30 ft. in height, and is backed up on the inside by an earth and masonry bank 6 to 12 ft. thick at the top, and sloping so that it can be climbed anywhere. The wall is completely broken down on the west face at a point close to the north-west corner; there are three other breaches in the north face between the North Gate and the north-west corner. The city has four gates, one in each face. They are not in the centre of the faces. Each of these gates is protected by a wall, similar to the city wall, built in front of the gates so as to enclose a space about 15 yds. square, this space being entered by a gate at the side. The wall is also pierced by two water-gates by which boats can

enter, one just north of the West Gate and the other just south of the East Gate. These water-gates would admit boats 8 ft. high and 10 or 12 ft. wide. Outside the wall is a navigable waterway 40 to 50 yds. wide and 4 to 9 ft. deep, which completely encircles the town and forms a moat. Between the wall and the moat is a space averaging 5 yds. in width, but at the two water-gates the wall comes right down to the moat. The moat is crossed at each of the city gates by a single-span wooden bridge, the moat narrowing at the bridges to 10 or 12 yds. The town contains about 800 houses inside the walls, and there are suburbs outside the North and East Gates, so that the total is probably about 1,000 houses.

Surrounding Country.—Chwansha lies in a level plain highly cultivated, full of villages and farms, and much cut up by creeks.

Supplies and Transport.—Fairly good supplies of rice, flour, fish, pork, and vegetables are obtainable, but the city is not rich. Boats are the only means of transport available; about 60 craft of different sorts were counted here in 1908.

Government.—Under the Manchu régime the city and district were under an official of the T'ing class, who was subordinate to Sungkiangfu. There was a military mandarin of the rank of *Shou-pei* or captain, with a few soldiers.

Communications.—A waterway practicable for boats of 3 ft. draught connects Chwansha with Shanghai. Immediately to the east of the town is an old sea-wall which runs through the east suburb and cuts Chwansha off from direct communication with the sea. This sea-wall is, however, pierced by a waterway about 1 mile north of the city, so that communication by water can be obtained with a second sea-wall, although not with the sea.

There is a post and telegraph office at Chwansha.

Distance from Chwansha

To Shanghai, by water, 19 miles.

FENGSIEN

Approximate { Latitude, 30° 55′. Longitude, 121° 42′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Fengsien, locally called Fêng-yen-yüen, is a city surrounded by a brick wall 25 to 30 ft. high and 3 ft. thick. This wall is backed up on the inside by an earth and masonry bank 5 or 6 ft. lower than the wall and 8 to 12 ft. thick at the top, sloping down so that it can be climbed from the inside. On the outside there is a sloping bank of earth, 12 ft. high, banked up against the wall, which reduces the apparent height of the wall by this amount. By the aid of this bank and of the numerous bushes that grow out of the wall, it could be climbed almost anywhere. The outside bank, however, does not exist at the gateways. There are four gates, one about the centre of each face. The gateways are protected in front by a wall of the same size as the city wall, enclosing a space about 50 yds. square, and entered by a side gate. All round outside the wall, at a distance of about 50 yds., there is a navigable waterway 30 to 40 yds. wide and from 6 to 10 ft. deep. This is crossed at each gateway by a single-span wooden bridge on stone abutments. At the bridges the waterway narrows to 10 yds. or less. Inside the city walls there are numerous open spaces. The city contains about 500 houses, and there are practically no suburbs.

Surrounding Country.—The city lies in a level plain much cut up by creeks, highly cultivated, and full of villages and farms.

Supplies and Transport.—Fengsien is extremely poor and there is no trade. Supplies of rice, flour, vegetables, &c. could be obtained in small quantities. A few boats are obtainable, but only 20 were seen here in 1908. Rough carts drawn by one buffalo are used in the country between Fengsien and the sea. These are restricted to one or two roads and are only used for farming operations.

Government.—In Manchu times the city and district were under a Hsien magistrate, who was subordinate to Sung-kiangfu. There was no garrison beyond a few soldiers for police purposes.

Communications.—Fengsien is connected with Shanghai by waterways navigable for boats of 4 to 4½ ft. draught. Navigable waterways also connect it with Nanhwei (Nên-wei-yüen) via Sinchang and with Chin-shan-hsien via Nankiao Ku. The city lies 5 miles from the sea and is cut off from communication with it by the sea-wall which prevents boats going through. This part of the coast is too shallow to allow of junks approaching it from the sea.

There is a post office agency at Fengsien.

Distances from Fengsien

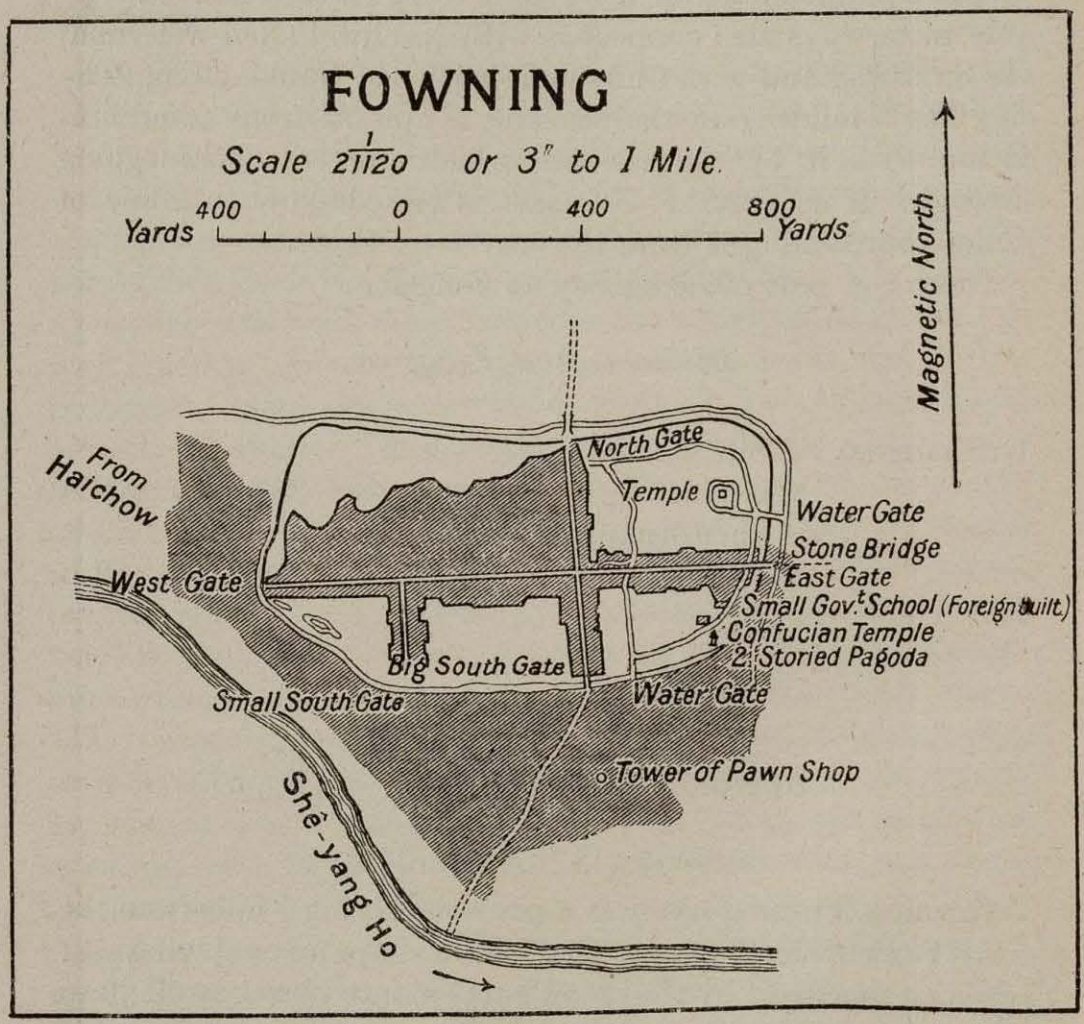
		miles	
To Shanghai via Sinchang and Cha-chiang	by water	35¾	Route 2 A
,, via Shên-hsiang-ch'ien and P'u-hsing-ch'iao	,,	32¼	,, 2 B

FOWNING. (See Plan)

Approximate { Latitude, 33° 46′. Longitude, 119° 50′.

Authority: G. E. Pereira, 1908.

Fowning, Fu-ning-hsien, is a poor city, lying ¼ mile from the north bank of the Shê-yang Ho. It is in shape an oval lying east and west, enclosed by the usual battlemented brick wall, 20 to 24 ft. high. The city measures 1,030 yds. from east to west, and 550 yds. from north to south. A good deal of this small enclosure is given up to cultivation and several temples, and it is intersected by several small canals with very little water in them. Houses are built partly of brick and partly of mud. There are five small gates (two on the south side), each with single entrances; there are also two small water-gates,


FOWNING
Scale 1/2112o or 3" to 1 Mile.
400 Yards
0
400
800 Yards
Magnetic North
From Haichow
North Gate
Temple
Water Gate
Stone Bridge
East Gate
West Gate
Small Gov.t School (Foreign built.)
Confucian Temple
2 Storied Pagoda
Big South Gate
Small South Gate
Water Gate
Tower of Pawn Shop
Shê-yang Ho

through which even small boats could not go, one 95 yds. east of the South Gate, and the other 96 yds. north of the East Gate. At the SE. corner of the wall there is a two-storied pagoda or tower, with a ladder going half way up it. The business part of the city is in the suburb which extends between the walls and the river to the south-west and south of the city. The **population** inside the city is probably about 5,000, and in the suburbs it may be anything from 15,000 to 25,000. There are no north or east suburbs. The figures for the whole district (*hsien*), according to *Yamên* returns, are 795,668 ; but too much reliance should not be placed on them. There are no missionaries, and very few foreigners have ever been here.

Government.—In 1908 the police numbered 50, and were untrained. There is a small *Yamên* guard of soldiers and some war-junks.

Communications.—The Shê-yang Ho coming from Hwaianfu, 150 li (50 miles) distant by land, flows to the SW. of the city, where it is a fine river 150 to 200 yds. wide and over 20 ft. deep. It then winds in an easterly direction (see Route 26 C) and reaches the sea at the temple Hai-shan-miao. According to local information, boats drawing 4 and 5 ft. can ascend to Hwaianfu, and boats go to Shanghai from April to August: at other times there is not enough water. The salt-boats follow the Kang Ho, Shangkang Ho, and Ch'uan-ch'ang Ho to Yencheng Ku. The Shê-yang Ho is said never to freeze, but the Kang Ho may in a severe winter.

There is a post office in Fowning.

Distances from Fowning

			mile		
To Tungchow	by land	about	222½	Route	21 A
,,	by water	,,	179	,,	21 B
Yencheng Ku	,,	,,	42½	,,	21 B (6)
Tungtaihsien	,,	,,	95	,,	21 B
Tungchow via Tai-chow Ku	,,	,,	239	,,	21 C

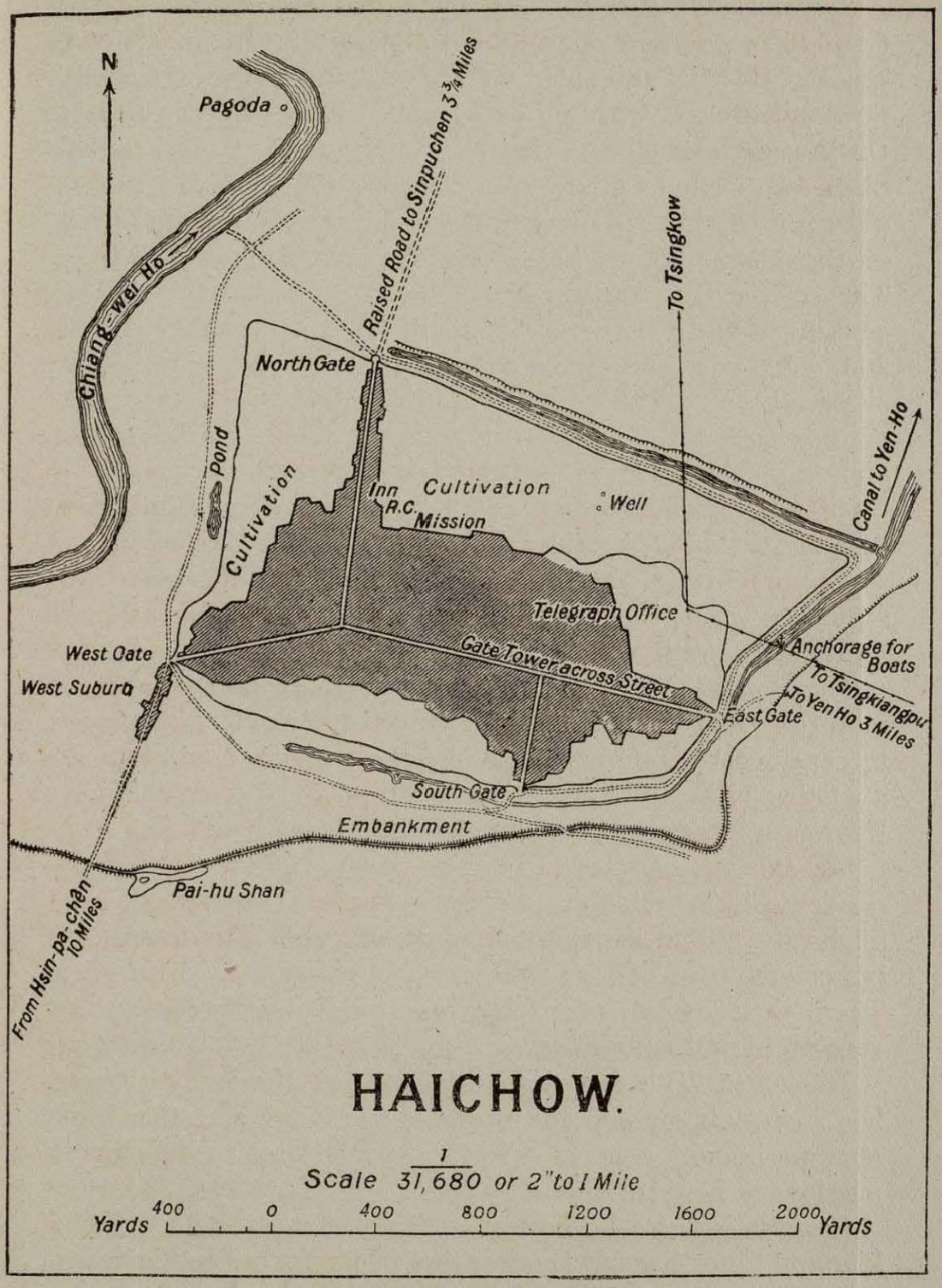
		miles	
To Liu-cha	by water	148 to 177	Routes 24 A, B, C, and 26 A
Hwaianfu	,,	about 62½	Route 26 B
the sea	,,	,, 76	,, 26 C
Haichow	by land	,, 83¼	,, 27 A
,,	land and water	,, 81½	Routes 27 A and 28 A

HAICHOW. (See Plan)

Approximate { Latitude, 34° 36′. Longitude, 119° 18′ Height, sea-level.

Authority: mainly H. R. Davies, 1908

Haichow has recently been officially divided into two parts known as Kuan-yün-hsien and Tung-hai-hsien. The city is of somewhat irregular shape, roughly an oblong, measuring about 1¼ miles from east to west and ¾ mile from north to south, with a perimeter of about 4 miles. It is surrounded by a wall built chiefly of brick but partly of stone, about 25 ft. high, 1½ ft. thick at the top, and backed on the inside by a bank 6 to 8 ft. lower than the wall, and 6 ft. thick at the top, sloping away gradually to the inside, so that it is from 40 to 60 ft. thick at its base. It is accessible anywhere from the inside. There is a gate in each of the four sides. Each is protected by a wall similar to but smaller than the city wall, enclosing a semicircular space of 30 yds. radius in front of it. These spaces are entered by another gate which at the North Gate is in the west side of the space, at the East Gate in the south, at the South Gate in the east, and at the West Gate straight in front. Near the west and north sides of the city there are open spaces and gardens, but the rest of it is fairly thickly covered, and probably contains about 1,500 houses in addition to a suburb of about 50 houses outside the West Gate. The **population** has been estimated at 10,000. Haichow is still a backward place. Its former importance as a port has been much reduced by the silting up of its waterway.


N
Pagoda
Raised Road to Sinpuchen 3¾ Miles
To Tsingkow
Chiang-wei Ho
North Gate
Pond
Cultivation
Inn
Cultivation
R.C. Mission
Well
Canal to Yen-Ho
Telegraph Office
West Gate
West Suburb
Gate Tower across Street
Anchorage for Boats
To Tsingkiangpu
To Yen Ho 3 Miles
East Gate
South Gate
Embankment
Pai-hu Shan
From Hsin-pa-chan 10 Miles
HAICHOW.
1
Scale 31,680 or 2" to 1 Mile
Yards 400 0 400 800 1200 1600 2000 Yards

Surrounding Country.—On the north and west sides the country is flat and open, and the Haichow Ho or Ch'iang-wei Ho, a tidal, navigable river, averaging 100 yds. in width, flows northward within ¼ mile of the west face of the city. On the east and south sides, the lower slopes of the Haichow Shan (also called Ching-p'ing Shan and the Ch'ü-yang Shan), a steep, rocky hill of considerable height, extend to within ½ mile of the city, making the approaches irregular and broken. They end with a bank, which appears to be partly artificial, running round this part of the city at a distance from it of 200 to 300 yds., and giving complete cover from the top of the city walls.

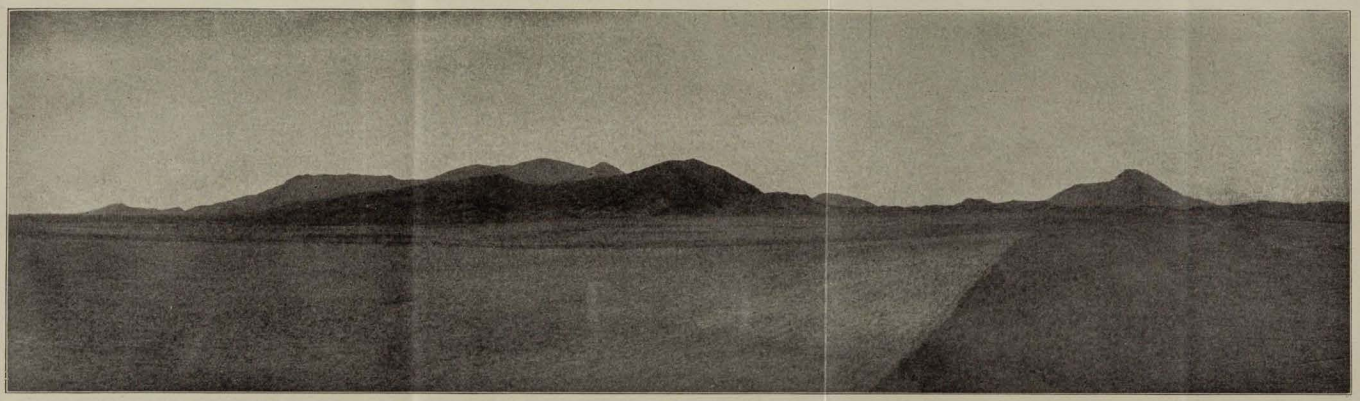
Supplies.—Supplies of flour, wheat, millet, chickens, fish, and vegetables are to be found in considerable quantities. There are very large supplies of flour in the mill at Sinpuchen, 3½ miles distant (see Sinpuchen). Water near Haichow is apt to be brackish. The best well is outside the East Gate. Others exist in the city, but the water-supply is bad, and limited in quantity.

Transport.—Carts are used, but wheelbarrows are the common form of transport of the country and are to be obtained in considerable numbers. At Haichow only a few boats are available either on the Haichow Ho or the Yen Ho (No. 1). There are large numbers at Sinpuchen.

Government.—In 1908 Haichow was a *Chih-li Chou* (Independent Sub-Prefecture) directly under the Tao-t'ai at Süchowfu. The districts of Shuyang and Kanyü and the important town of Tsingkow were under its jurisdiction. There was a small garrison whose chief duty was the prevention of salt smuggling.

Missions.—The American Presbyterian Mission (Southern) has a station outside the north of the city, and the Jesuit Mission bought a house with the purpose of establishing a missionary here in 1908.

Communications.—There is a direct road south to Tsingkiangpu ; northwards there is one to Tsingkow and Ichowfu, and NE. another to Sinpuchen. There is water communication



HAICHOW SHAN

P. 446

by the Hai-chow Ho with Sinpuchen down stream, and with Shuyang up stream. A canal with 1 ft. of water in winter and 2 to 2½ ft. in summer connects the NE. corner of Haichow with the Yen Ho (No. 1) 2 miles distant at Hsin-ho-t'ou.

For information concerning Sinpuchen and the Yen Ho, No. 1, see Sinpuchen.

For projected railway to connect Sinpuchen and Haichow with Tsingkiangpu see Chap. IX, railway No. XIV.

There is a post and telegraph office at Haichow.

Distances from Haichow

		miles	
To Tsingkiangpu	by water	95½	Route 28 A
Tsingkiangpu	by land and water	97	,, 28 D
Tsingkiangpu	by land	79½	28 B
via Shuyang	,,	91	,, 28 C
Shuyang	,,	48½	,, 28 C
Sinpuchen	,,	3½	,, 28 B
Tsingkow	,,	19	,, 30 A
Jihchaohsien	,,	67	,, 30 A
Kiaochow via Jihchaohsien	,,	143	,, 30 A
,, via Chüchow Sung	,,	about 181	,, 30 B
Fowning	,,	83¼	,, 27 A
,,	by land and water	81½	Routes 27 A and 28 A
Nan-ch'êng	by land	6¼	Route 29
Süchowfu, via Ichowfu	,,	179	,, 31 A
Kanyü	,,	23¾	,, 31 A
Ichowfu	,,	75¾	,, 31 A

HSIA-K'OU : see **Tsingkow.**

HUCHOWFU (Chekiang). (See Plan)

Approximate { Latitude, 30° 54′. / Longitude, 120° 4′.

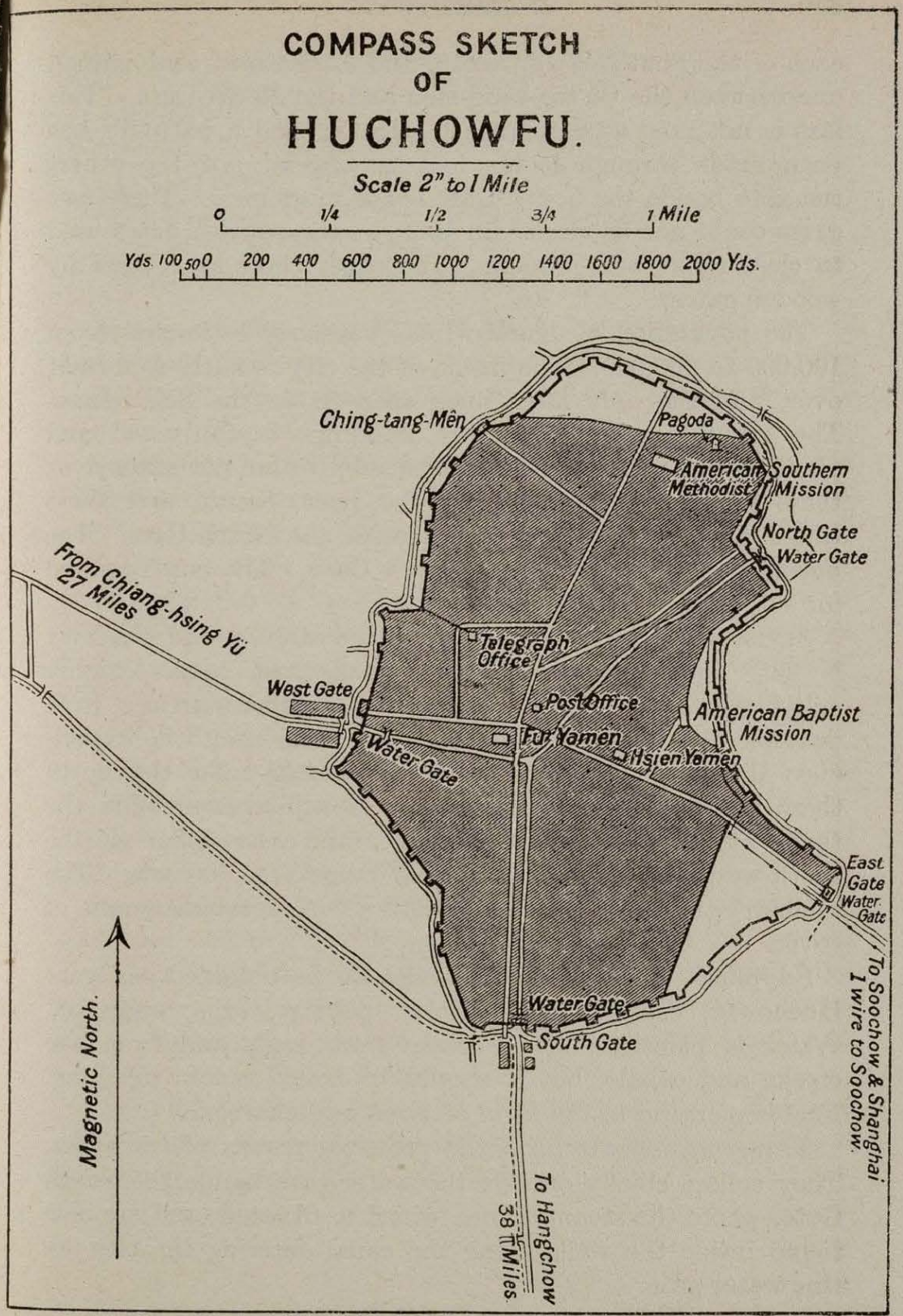
Authority: A. H. Hilton-Johnston, April, 1909.

Huchowfu (Wu-tseu-fu) is a city of very irregular shape, but more or less an oblong with the long sides lying north and south. The total perimeter is $5\frac{1}{2}$ miles. It is surrounded by a stone wall about 23 ft. high and 2 ft. thick at the top, backed on the inside by a bank 24 ft. thick reaching within 6 ft. of the top of the wall which is provided with loopholes and crenellations alternately at every 5 ft. The bank is roughly paved with stone, and is revetted on the inside so that it cannot be climbed except at each of the gates where steps lead up to it, and at a few other points. Flank defence is provided by small projecting buttresses at intervals of 160 yds.

There are five gates: (1) South Gate, in south wall; protected by a bastion 35 yds. square, with entrance in east side. (2) West Gate, in west wall; bastion 15 yds. deep by 70 yds. wide, with entrance in west. (3) Ch'ing-tang-mên, in west wall; inner bastion rectangular, 20 yds. deep by 50 yds. wide, enclosed by an outer semicircle of 80 yds. radius; entrance in north. (4) North Gate, in east wall; bastion 25 yds. deep by 30 yds. wide; entrance in south. (5) East Gate, in east wall; rectangular inner bastion 30 yds. deep by 60 yds. wide, partly enclosed on the north side by an outer defence 50 yds. deep by 40 yds. wide which overlaps the east side; entrance in the southern part of the east side. A canal surrounds the city and does duty as a moat. It varies in width from 5 yds. along most of the west, north, and east walls, to 40 yds. along the south wall, and is bridged at each of the gates. It is only navigable along the south wall and for short distances near the water-gates.

There are five water-gates through the wall: one beside

COMPASS SKETCH OF HUCHOWFU.



each of the South, West, North, and East Gates, and a small one between the Ch'ing-tang-mên and the North Gate. This last is not now used for floating traffic, and a pathway has been made through it for foot-passengers. Of the others the gate beside the South Gate is the most used. These two gates could not be closed (in 1909) as the wooden gates used to close them were broken. The other three are closed by wooden gates.

The **population** of Huchowfu is variously estimated from 100,000 to 200,000. The inside of the city is fairly well built over, and the only large open space is at the SE. corner. The ground not occupied by buildings is cultivated and planted with mulberry-trees. The suburbs are not extensive; there are small suburbs near the East, South, and West Gates, and a rather larger one outside the North Gate. The business quarter is near the South Gate. The city is noted for silk yarn and silk crepe.

Surroundings.—The country immediately round the city is flat, much intersected with creeks and canals, highly cultivated, and thickly planted with mulberry-trees. It is passable for infantry only, and even this arm will experience difficulty on account of the creeks. To the north there is a high hill, a lower spur of which commands the town at a range of 3,500 yds., and the hills to the south-west also command it at a range of 1,700 yds. The mulberry-trees, when in leaf, afford a considerable amount of cover.

Supplies.—Supplies of all kinds can be obtained easily at Huchowfu, especially vegetables, poultry, eggs, and fish. Water is plentiful, being drawn from wells and from the creeks and canals, but it should be boiled before drinking. Fuel is plentiful in the form of wood and charcoal.

Transport.—Boats form the principal means of transport. They collect chiefly outside the water-gate beside the South Gate, where the steam-launch wharf is situated, and are also found inside the walls along the canal entering the city by this water-gate.

The following were counted in April, 1909 :

Launches	1
Large house-boats, with room for 10 to 15 men to sleep	30
Small house-boats, with room for 6 to 8 men .	40
Cargo-boats, 50 ft. by 9 ft.	40
Small boats of *sampan* class, 25 ft. by 3 to 5 ft.	120

Coolies are the only form of land transport used, and of these there are not many, as the water communications are so good. From 300 to 500 are probably employed in the city.

Government.—In 1909 the city was of the Fu class, and included the districts of Wu-ch'êng Hsien (Ung-tsêng Yü) and Kuei-an Hsien. There was no garrison and only a small police force of 30 men, who were armed with Mauser rifles, and appeared to be well trained and efficient.

European residents.—With the exception of the missionaries there are no European or American residents in Huchowfu. The following missions have stations in the city :

The American Baptist Mission.
The American Southern Methodist Mission.
The Lazarist Mission.

The members of these missions numbered 15 in 1909 and had increased to 26 in 1913.

Communications.—Communication is effected almost entirely by water. Steam-launches towing boats run once a day from Shanghai and Soochow to Huchowfu, and also from Hangchow. Roads are little used and are very few in number. Every place of importance has a good waterway leading to it, and all travelling is done by boat.

There are post and telegraph offices in the city. The post office is near the centre of the city; the telegraph office is about 600 yds. from the West Gate.

Distances from Huchowfu

		miles	
To Shanghai—via Pingwang and Lili	by water	108½	Routes 4 A and 1 B
—via Chukiakio	,,	105½	Routes 4 B and 1 B
Soochow	,,	55	Route 1 C
Hangchow Settlement	,,	37¾	,, 1 B
Hangchow City	,,	43¼	,, 1 B
Pingwang	,,	41	,, 1 B
Ihing	,,	47¾	,, 1 D
Loshe	,,	86¾	,, 1 D

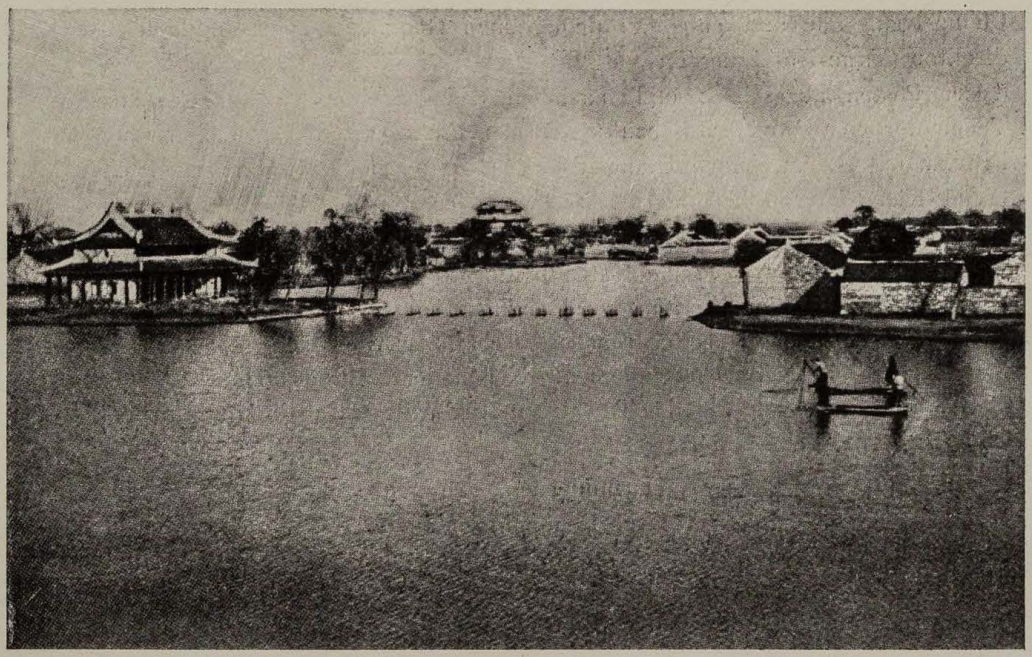
HWAIANFU

Approximate { Latitude, 33° 30′. Longitude, 119° 10′.

Authority: mainly A. H. Hilton-Johnson, 1908.

Hwaianfu, recently officially named Huai-an-hsien, and commonly called *Huai-ts'ên,* is a walled city on the east bank of the Grand Canal, 100 miles north of the Yangtse River. The population, which is very poor, is estimated to be about 30,000.

It actually consists of three walled cities, namely, the Chiu-ch'êng, the Hsin-ch'êng and the Ko-ch'êng. The chief of these is the Chiu-ch'êng or Old City, which is roughly square in shape with a perimeter of about 4½ miles. Its west wall runs parallel to, and about 100 yds. from, the canal bank. The Ko-ch'êng and Hsin-ch'êng adjoin the Old City on the north and NE. sides respectively. They are of little importance, and probably do not contain more than about 500 houses altogether. The wall of the Old City is about 25 ft. high and in good repair. It consists of the usual crenellated and loopholed brick facing, backed on the inside by a thick earth bank with a path along the top, accessible from the interior at all points.



NORTH-WEST CORNER OF HWAIANFU: NORTH KIANGSU

There are four gates in the Old City, one in each face, and three and five in the Ko-ch'êng and Hsin-ch'êng respectively. These have classical names, but are commonly called after the points of the compass. Each is protected by an outer rampart, built out from the wall to enclose 1,000 or more sq. yds., and having its own gateway at the side at right angles to that of the main wall. These gateways are about 18 ft. square, those in the main wall being considerably larger. Both have heavy, iron-bound, wooden doors which are closed at night. They are surmounted by two-storied gate-houses on the top of the wall.

There are three water-gates, one each in the north, west, and south walls. They are about 12 ft. square, and admit streams on which small boats ply in and out of the city at will.

The interior of the Old City is fairly thickly built over, though there is much water within the walls. The interiors of the two others are mostly open spaces, with a large amount under cultivation. The whole lies below flood-water level, and it sometimes happens that during the summer the gates are kept closed for considerable periods and backed up with earth ramparts for protection against flood. The houses are well built of brick with tiled roofs. The most prominent buildings are the gate-houses on the walls and a drum-tower in the centre of the city.

Suburbs.—The principal suburbs are those to the NW. and SW. of the city along the banks of the canal, containing in all more than 1,500 houses.

Surrounding country.—The surrounding country is low-lying, very swampy in places, and liable to floods in summer. It is very flat, broken in many places, much under cultivation, and studded with trees. West of the canal, it is generally passable for all arms in the dry season ; east of it, the movements of cavalry and artillery would be largely confined to the canal bank and the roads.

Supplies.—Large supplies of food, fuel, and forage would always be obtainable. The water from the canal and from wells is good.

Transport.—About 300 boats of various kinds and sizes, and one or two steam-launches would be available. Donkeys without pack gear are also largely used, but no carts. Upwards of 1,000 wheelbarrows could also be procured. Horses and mules are seen on the banks of the canal.

Government.—In 1908 Hwaianfu was a city of the first class under its own Tao-t'ai actually residing at Huai-kuan, 4 miles to the north, on the canal. The chief official was the Chih-fu or Prefect, whose *yamên* is inside the North Gate. The Chih-hsien or the district magistrate of Shan-yang Hsien also resided in the city. Another important official was the Tsung-ping or Chên-t'ai, general commanding Chinese Territorial troops. There were about 500 police, mostly in the Old City, and a number of troops quartered on the west side of the canal.

European residents.—There is a branch of the American Presbyterian Mission (Southern) here, and also a Roman Catholic Mission with European missionaries.

Communications.—Communication is mainly north and south by the Grand Canal, and by a road passable for all arms along the top of its eastern bank, north to Tsingkiangpu and south to Liu-cha. One or more launches call daily in both directions at all times of the year. There are post and telegraph offices in the city.

Distances from Hwaianfu (West Gate)

		miles		
To Tsingkiangpu	by water	$8\frac{1}{2}$	Route	19 (1)
Paoying	,,	$22\frac{1}{2}$	,,	19 (1)
Kaoyuchow	,,	57	,,	19 (1)
Yangchow	,,	$88\frac{1}{2}$	,,	19 (1)
Chinkiang	,,	$102\frac{3}{4}$	,,	19 (1)
Yencheng Ku	,,	77	,,	25 B and 25 C
Powning	,, about	$62\frac{1}{2}$	,,	26 B

IHING

Approximate { Latitude, 31° 23′. Longitude, 119° 50′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Ihing (Wade, Yi-hsing-hsien) is a walled city, lying about 9 miles north-west of the T'ai Hu or Great Lake.

In 1908 it was divided into two Hsien, viz., Yi-hsing Hsien on the west and Tsing-chi Hsien (Ching-hsi Hsien) on the east. The walls are about 24 ft. high, in good repair, of stone with brick parapets, earth embankment inside the walls, 3 or 4 ft. thick at the top, and in places revetted with stone on the inside. The walls, especially on the east side, are irregular in outline, though roughly they follow the cardinal points. The west wall is about 1,140 yds. long, the east wall 1,208 yds., the south wall 692 yds., and the north wall 965 yds. There are five gates, of which the western is double, the rest have single straight exits from the city, and a small uninhabited guard-house over the gateways. The West Gate is 96 yds. from the north-west corner, the South Gate 337 yds. from the south-west corner, the East Gate 957 yds. from the south-east corner and leads into a small, walled, north-west suburb, and the North Gate is 165 yds. from the north-east corner. There is also a small south suburb.

In addition there is a water-gate in the north wall 694 yds. from the south-west corner and another in the east wall 845 yds. from the south-east corner. A canal flows through them from a lake in the west and is filled with boats; two or more small branch canals run up to the north wall. The main east to west canal is crossed by a high stone bridge in the centre of the city.

The magistrate of Yi-hsing Hsien gave (1908) the following details: 'There are 1,200 houses in the Yi-hsing Hsien part of the city. There are no soldiers or foreigners, though the Catholics have mission stations at Shih-li-p'ai, Niu-chia-ts'un,

and Yü-hua-ti near the city. The visiting priest (a Jesuit) is Italian.'

The houses are of stone or brick with tiled roofs. The city is well covered with houses, and with small waste patches in the south-east and north-west corners. Streets are very narrow. An inhabitant put the number of houses in the city for the two Hsiens at 5,000. The chief trade is rice and fish, but the neighbourhood has for centuries been noted for its pottery.

To the west of the city there is a large lake, called the Tung-kuei Hu. High barren hills lie several miles to the south, of which the T'ung-kuan Shan is the highest; foot-hills with some scrub lie 2 miles to the south-east. The T'ai Hu is about 10 miles to the east.

Communications.—There are waterways running in many directions, the principal routes being from Ihing to Loshe on the Grand Canal in a north-easterly direction, to Wuhu westerly, and to Hangchow via Huchowfu and the T'ai Hu in a southerly direction.

There is a post and telegraph office in the city.

Distances from Ihing

		miles		
To Loshe	by water	39½	Route	16
Liyanghsien	,,	22½	,,	16
Wuhu	,,	102¼	,,	16
Huchowfu	,,	47¾	,,	1 D
Hangchow Settlement	,,	86¾	,,	1 D
Kaoshun	,,	64	,,	16

KAOSHUN

Approximate { Latitude, 31° 20′. Longitude, 118° 55′.

Authority: Military Report on the Province of Kiangsu (South), 1909

Kaoshun is a small, unwalled town said to contain 1,789 houses. It is very narrow, and the main street runs south-

east and north-west. It is situated at the NW. corner of the Hsiao-nan Hu, where the Kaoshun River flows into the lake. It is on the left bank of the river, and protected from the lake by a 10-ft. embankment which extends about ½ mile to the south of the city. All the streets are paved.

Surroundings.—To the north the country is undulating, and on either side it is low-lying and flooded all the way to Ts'ang-hsi, protected from river and side-creeks by high embankments. Villages are plentiful. The river to the south is crossed by a fine stone bridge of seven arches, about 60 yds. long and 7 yds. wide. Large salt junks from Chinkiang come via Taiping An up to here. They usually cannot come from December to March, but on December 22, 1907, after exceptional autumn rains, there were three or four, one nearly 100 ft. long, drawing 6½ ft. of water and carrying 1,500 'tan' (about 136 tons). They said they could also go to Wuhu, but this is doubtful, as between Wu-hsi and Wuhu there are two shallow places which big boats cannot often pass, and which force them to go round by Taiping An.

Supplies.—The shops are poor: hens' eggs are scarce, and there is little or no beef; but rice, pork and vegetables, ducks' eggs and oranges are plentiful.

Communications.—Kaoshun lies on a mixed land-and-water route from Loshe, on the Grand Canal, to Wuhu. There is a post office here.

Distances from Kaoshun

	miles	
To Loshe	103½	Route 16
Ihing	64	,, 16
Liyanghsien	41½	,, 16
Wuhu	38¼	,, 16
Hsia-tung-pa-chên (Lower Barrier)	12¾	,, 16

KAOYUCHOW

Approximate { Latitude, 32° 44′.
Longitude, 119° 27′.

Authority : A. H. Hilton-Johnson, 1908.

Kaoyuchow, recently officially named Kao-yu-hsien, is a walled city on the east bank of the Grand Canal, 43 miles north of the Yangtse. The population is estimated at 15,000. The city is, roughly, a square, of which the west wall and western half of the south wall are skirted by the canal at a distance of about 60 yds. The wall is 20 to 25 ft. high, some 3½ miles in perimeter, and in good repair throughout. It consists of the usual crenellated and loopholed brick facing, backed on the inside by an earthen bank with a path along the top of it, accessible at any point from the interior.

There are four gates, one in each face, called after the points of the compass. These are protected in front by ramparts thrown out from the wall, and similar to it in construction. Each entrance is surmounted by a small gate-house on top of the wall, and is furnished with heavy, iron-bound, wooden doors, which are closed at night. The gates on the canal bank have their entrances bricked up to 6 ft. wide and 8 ft. high, so that they may be quickly stopped with earth in time of flood, which, as the city lies well below high-water level, often becomes necessary. The canal forms a moat on the west and south, and on the other sides there are smaller waterways near the foot of the wall.

There are extensive suburbs of about 1,000 houses outside the north and south gates. The chief business quarter of the city is situated in the vicinity of the latter, both inside and outside the walls.

A very large area in the interior is not built over, all the western portion being similar to the open country outside, with trees, ponds, cultivation, and scattered houses. The houses are strongly built of brick or stone, with tiled roofs.

The northern suburb especially is clean, open, and contains many buildings suitable for occupation by European troops. The principal landmarks in the city and neighbourhood are two pagodas, about 150 ft. high, just outside the south wall near the corners, and another outside the wall near the SE. corner.

Supplies and water.—See under Hwaianfu. Successful flour-mills have been established at Kaoyuchow recently.

Transport.—See under Hwaianfu, but the numbers of boats and barrows available would be rather less. Boats lie almost entirely in the vicinity of the South Gate.

Government.—In 1908 Kaoyuchow was dependent on Yangchow, which itself was under the Tao-t'ai of Hwaianfu. The chief official was the Chih-chou or sub-prefect, whose *Yamên* was inside the East Gate. There were about 100 police in the city and suburbs, and some troops were also quartered in the city.

European residents.—The foreign missions represented were the Roman Catholic and the China Inland Missions, both situated inside the North Gate and in charge of European missionaries: but the Protestant Mission appears to have been recently withdrawn.

Communications.—See under Hwaianfu. The post office is situated in the suburb outside the North Gate. There is a telegraph office. There is water communication to the west, the entrance from the canal to the Kaoyu Hu (lake) being immediately opposite the SW. corner of the city wall.

Distances from Kaoyuchow (West Gate)

		miles	
To Paoying	by water	34½	Route 19 (1)
Hwaianfu	,,	57	,, 19 (1)
Tsingkiangpu	,,	65½	,, 19 (1)
Yangchow	,,	31½	,, 19 (1)
Chinkiang	,,	45¾	,, 19 (1)

KASHAN (Chekiang)

Approximate { Latitude, 30° 47′. Longitude, 120° 34′. Height, sea-level.

Authority : Military Report on the Province of Kiangsu (South), 1909.

Kashan, Chia-shan-hsien (Wade), or, as it is locally pronounced, Ka-zên, is a city and district in northern Chekiang. The railway station is named Ka-shai. The city is a rough oblong with a perimeter of 2½ miles, the northern and southern faces measuring about 1,400 yds., and the eastern and western faces 800 yds. The wall is of brick, with a foundation of a few feet of stone ; it averages 20 ft. in height and is 2 ft. thick. On the outside it is backed up by a bank 5 ft. lower than the wall and 20 ft. thick. This bank is revetted with brick on its inner side, so that it cannot easily be climbed except by the steps which ascend it at each gate. There are four gates, one in each face. Each gate is defended in front by a wall similar to the main city wall, enclosing a semicircular space 30 yds. in radius. The entrance gate to this space in the case of the South Gate is straight in front of the main city gate, but in the other three the entrance is in the side of the semicircle. At the West Gate it is in the south side, at the North Gate in the east side, and at the East Gate in the north side.

All round the city, at a distance of from 10 to 20 yds. from the wall, is a moat which averages 15 yds. in width and varies in depth from 3 to 4 ft. on the north side to 6 or 8 ft. on the south. The moat is crossed by two bridges near the West Gate, and by one bridge at each of the other gates. Inside the walls there are some open spaces near the north side, most of the houses being in the southern half of the city. There is a large suburb outside the East Gate stretching for ¾ mile eastward. Outside the West Gate is another suburb. The street running through the city from the East to the

West Gate appears to be the business quarter. Altogether there are probably 800 houses inside the walls, 600 in the eastern suburb, and 400 in the western suburb—a total of 1,800.

Surroundings.—The city is surrounded, except where there are suburbs, by cultivated country, much cut up by creeks, scattered houses, and clumps of trees. The whole country is quite flat.

Supplies.—Supplies of rice, flour, vegetables, fish, chickens, ducks, and pork are obtainable in large quantities. Water is obtained from wells and also from canals, and is fit for consumption after boiling.

Transport.—Boats form the only means of transport. There are no wheelbarrows. Most of the boats are to be found in the eastern and western suburbs. Several hundreds of ordinary passenger and cargo-boats can be found here as a rule, but not the large passenger-boats towed by launches.

Government.—Kashan is a town of the Hsien class subordinate to Kashing. There was no garrison in 1909, but a few men were kept for police purposes. There were no foreign residents.

Communications.—For a few months in the year, when the water is high, usually in the autumn, launches pass through Kashan on the way from Shanghai to Kashing. For the rest of the year the launches take a more northerly route, passing however, within a mile of the western suburb. Passengers are conveyed by boat to meet the launch via a creek a mile long (and itself passable for launches) which goes northward from the western end of the western suburb. Launches could, however, come at all times of the year from Kashing into the western suburb and within $\frac{1}{4}$ mile of the West Gate. From the Shanghai direction launches would always get to Chang-ching-hui, 3 miles distant, and could usually at high tide get into the eastern suburb.

There are post and telegraph offices at Kashan. The Shanghai–Hangchow Railway has a station here a short distance outside the NW. corner of the city.

Distances from Kashan

		miles		
West Gate to Shanghai	by water	$52\frac{3}{4}$	Route	3 B
East Gate ,,	,,	$51\frac{3}{4}$	,,	3 B
To Kashing	,,	$10\frac{1}{2}$	,,	3 B
Shanghai	rail	$44\frac{1}{4}$	,,	—
Hangchow	,,	$68\frac{3}{4}$	,,	—

KASHING (Chekiang). (See Plan)

Approximate { Latitude, 30° 43′. Longitude, 120° 40′. Height, sea-level.

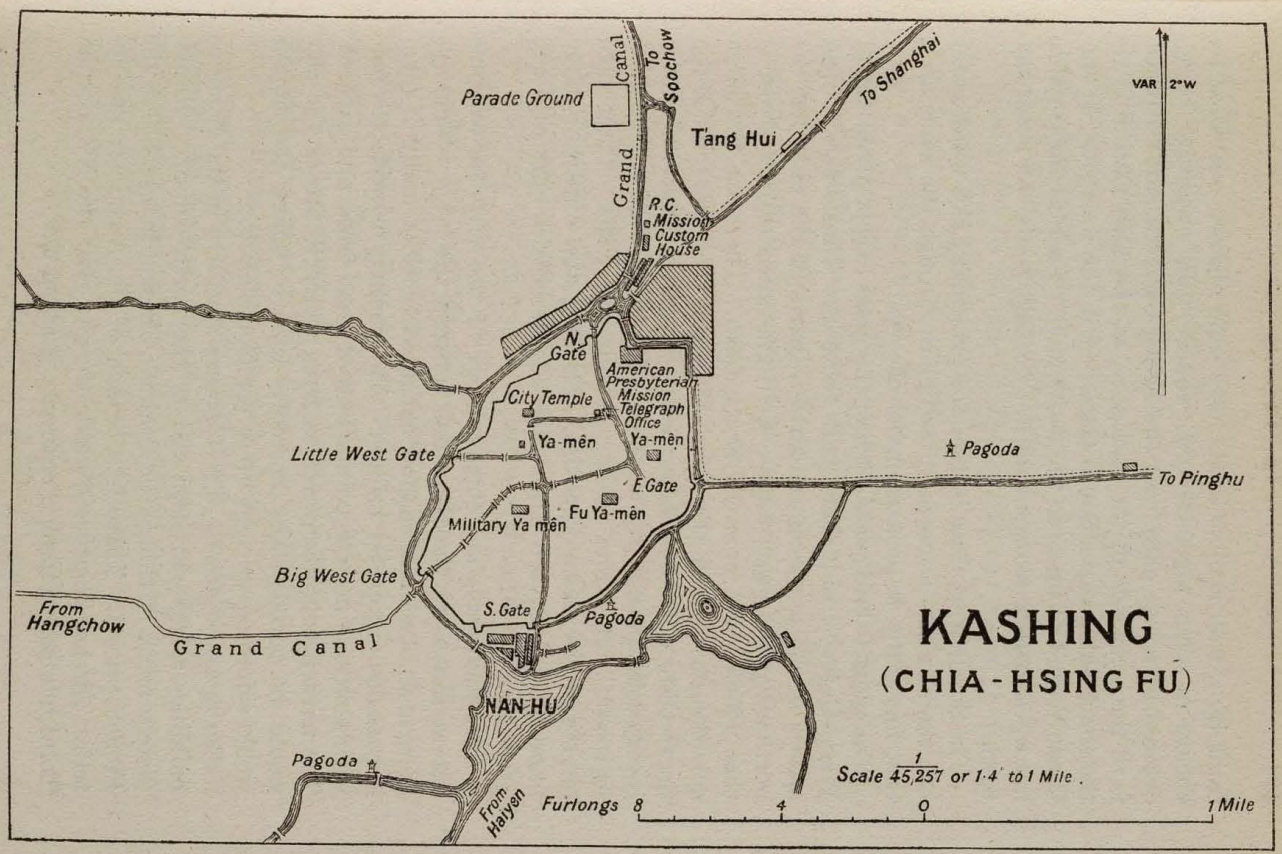
Authority: mainly Military Report on the Province of Kiangsu (South), 1909.

Kashing, or Chia-hsing-fu (Wade), is a flourishing city of 60,000 inhabitants, situated in Chekiang at the junction of the Shanghai–Hangchow Railway and the Grand Canal.

The city is of irregular shape, about $3\frac{1}{2}$ miles in perimeter, and is surrounded by a wall about 25 ft. high and 2 ft. thick, the lower part of which to a height of 6 to 9 ft. is of stone, the upper part of brick. The wall is backed up on the inside by a masonry and earth bank averaging 10 to 12 ft. thick and 5 or 6 ft. lower than the wall; this bank is faced with brick inside so that its inner face is perpendicular. The top of the bank is therefore not accessible from the inside except by steps which lead up to it at the gates, and by a few paths where the brick facing has tumbled down. The wall is topped by a brick parapet 5 ft. high and 2 ft. thick.

All round the wall, at a distance which varies from 20 to 50 yds., is a navigable waterway, which forms a moat. This varies as a rule from 30 to 50 yds. in width, but on the western side, where it is formed by the Grand Canal, it is 100 yds. wide, while at some of the bridges, notably at the North and East Gates, it narrows down to 10 or 15 yds. in width.

There are five gates, called the North, East, South, Great West, and Small West Gates. The four first are protected in


Parade Ground
Canal
To Soochow
To Shanghai
T'ang Hui
Grand
R.C. Mission
Custom House
VAR 2°W
N. Gate
American Presbyterian Mission
Telegraph Office
City Temple
Ya-mên
Ya-mên
Pagoda
Little West Gate
E. Gate
To Pinghu
Military Ya mên
Fu Ya-mên
Big West Gate
S. Gate
Pagoda
From Hangchow
Grand Canal
KASHING
(CHIA-HSING FU)
NAN HU
Pagoda
Scale 1/45,257 or 1·4" to 1 Mile.
From Haiyen
Furlongs 8 4 0 1 Mile

front by a wall similar to the city wall, thrown out so as to enclose a space about 30 yds. square, this enclosure being entered by a side gate. At the North Gate the side entrance is in the west side of the enclosure, at the East Gate it is in the south side, at the South Gate it is in the west side, at the Great West Gate it is in the south side. Each of these gates has a water-gate alongside of it by which boats can enter the town.

The Small West Gate is intended principally as a water-gate, but there is also a footpath leading in through the same arch that forms the water-gate under the wall.

The moat is bridged at each of the gates except at the Small West Gate. Inside the wall there are considerable open spaces in the southern and eastern parts of the city, but the northern part is well built over. The main market street is that which leads from the North Gate. There are two large suburbs, one outside the North Gate and the other outside the South Gate. The former is the larger and forms an important commercial quarter of the place. The large firms and wealthy merchants are found mostly outside the walls. These deal largely in rice, beans, and oil. Kashing also exports a large number of barnyard fowls and ducks, besides eggs and egg products.

Surroundings.—The surroundings of the city are to some extent shown on the plan, but between the large waterways there is a network of shallow canals and creeks, many of them impassable except by bridges. The country is perfectly flat, with scattered houses, plantations of small trees, and gardens. The most favourable direction from which to attack the city would be through the northern suburb, where the houses would afford cover right up to the North Gate.

European residents.—The Customs staff live in the Customs buildings at the northern end of the north suburb. Immediately north of this is the Catholic Mission in which live the French priests. There is a branch of the American Presbyterian Mission (Southern) inside the city near the NE. corner. Total number of foreign residents is about 20.

Supplies.—Supplies of such things as pork, fish, rice, flour, and vegetables are obtainable in large quantities. Water is from wells and from the creeks and canals. It is fit for consumption after boiling.

Transport.—Boats are almost the only form of transport used. Several hundred boats of various sizes and descriptions are always to be found at Kashing. Four Shanghai launch companies have offices in the northern suburb. Wheelbarrows do not exist.

Government.—Kashing prefecture was subordinate to the Tao-t'ai of Hangchow. In the city were the headquarters of two Hsien districts—Kashing and Hsin-shui. The following Hsien districts were also under Kashing: Kashan, Haiyen, Shihmen Che, Pinghu, and Tunghianghsien. There was a garrison of old-fashioned troops commanded by a Hsieh-t'ai (Colonel).

Communications.—Previous to the opening of the railway all travelling was done by boat. There are waterways navigable by steam-launches leading to Shanghai, Soochow, Hangchow and Siashih.

To Shanghai the launches go through Kashan when the water is high enough, as is usually the case in autumn. When the water is low they take a more northerly route, leaving Kashan a mile to the south.

To Soochow and Hangchow the launch route follows the Grand Canal. Occasionally, at exceptionally low water, the Grand Canal is too shallow for launches between Kashing and Hangchow. They then have to go northward up the Grand Canal to Pingwang, and thence by a more westerly creek, rejoining the canal at Wu-li-t'ou or at Tangsi, a few miles north of Hangchow (see Route 1 B).

Though roads are very little used for travelling, a road passable for horses runs along the bank of the Grand Canal to Soochow. Southwards this road continues to Shihmen Che, where it leaves the Grand Canal, turning south to Changan, and thence following the Haining Canal to Hangchow.

There are post and telegraph offices in Kashing, inside the walls.

The Shanghai–Hangchow Railway has a station a short distance east of the city wall.

Distances from the North Gate of Kashing

		miles		
To Shanghai	by water	63¼	Route	3 A
,,	,,	,,	,,	3 B
,,	alternative routes	75 and 67	,,	3 C and 3 D
Kashan	by water	10½	,,	3 B
Soochow	,,	39	,,	1 A
Shimen Che	,,	27½	,,	1 A
Hangchow Settlement	,,	57¾	,,	1 A
Hangchow City	,,	63¼	,,	1 A
Pinghu	,,	17½	,,	3 C
Chapu	,,	25½	,,	3 C
Shanghai	by rail	56		
Hangchow	,,	57		

KIANGYIN. (See Plan)

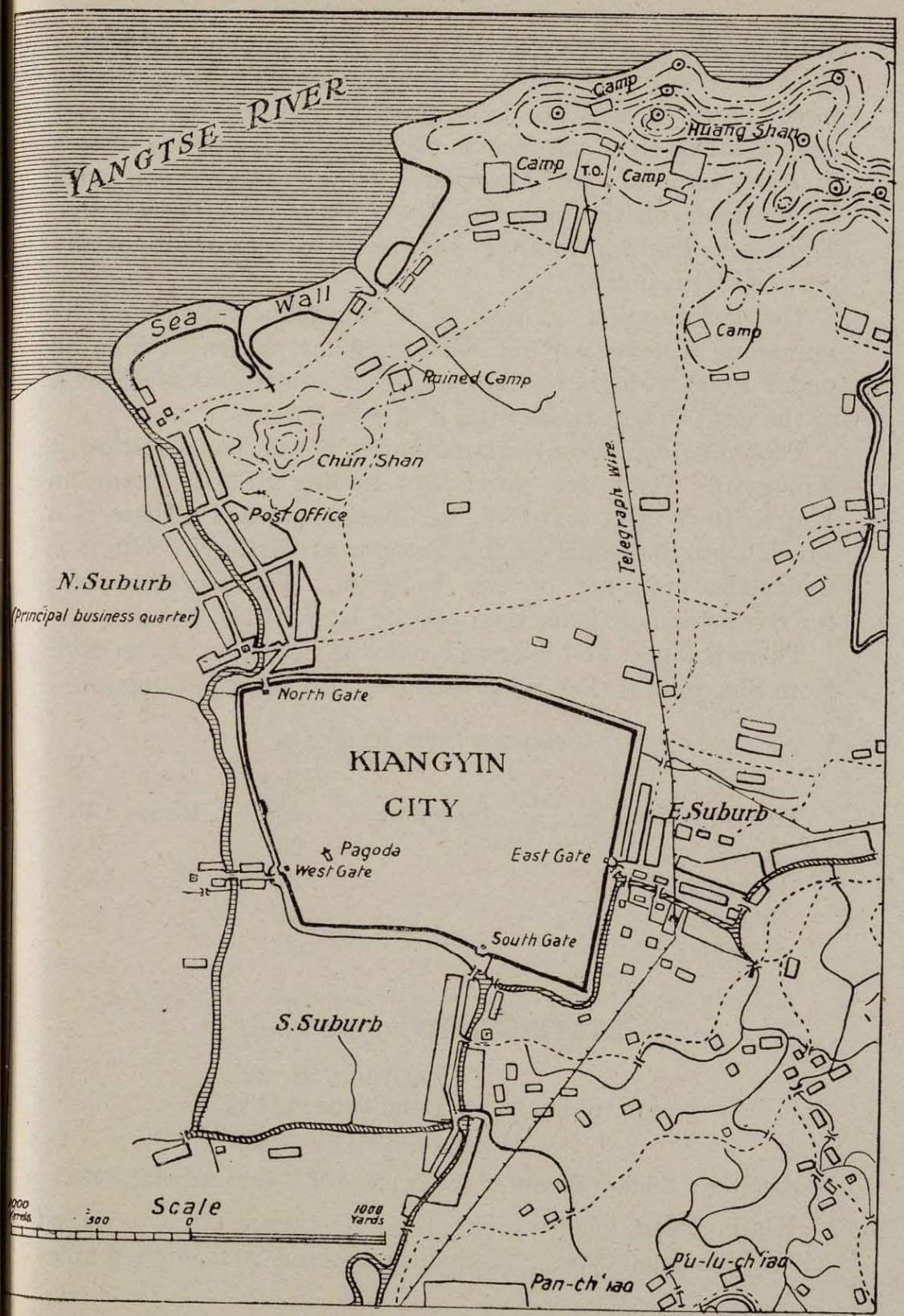
Approximate { Latitude, 31° 52′. Longitude, 120° 19′. Height, 50 ft.

Authority: mainly Military Report on the Province of Kiangsu (South), 1909.

Kiangyin, locally called Kang-yin-yüen, is a walled city of quadrilateral form situated near the south bank of the Yangtse. The walls are about 25 ft. high, 3½ miles in perimeter, in fair repair, and are surrounded by a moat 5 to 20 yds. wide and 2 to 12 ft. deep according to the tide and season. There is a tall and conspicuous pagoda in the city. There are extensive suburbs outside the East, South, and North Gates, that outside the North Gate being the principal business quarter of the city.

Kiangyin is a well-known entrepôt for rice and is reached

KIANGYIN


YANGTSE RIVER
Camp
Huang Shan
Camp
T.O.
Camp
Sea Wall
Camp
Ruined Camp
Chün Shan
Post Office
Telegraph Wire
N. Suburb
(Principal business quarter)
North Gate
KIANGYIN
CITY
E. Suburb
Pagoda
West Gate
East Gate
South Gate
S. Suburb
1000 Yards
500
0
Scale
1000 Yards
Pu-lu-ch'iao
Pan-ch'iao

after passing a narrow channel only a mile wide into which the river here contracts owing to a cluster of hills projecting from the S. bank. The hills north of the city are fortified against an up-river advance and Kiangyin is a military station of some importance. There are also some forts concealed by the trees on the opposite side of the river, near Yin-sha. The creeks leading from the Yangtse to Kiangyin are usually crowded with junks.

The surrounding country is a flat plain intersected by numerous waterways, but with irregular ranges of hills all under 1,000 ft. high, to the north, east, south, and south-west of the city, at a distance from it of ¾ to 5 miles.

The American Presbyterian Mission, South, has a station at Kiangyin. There are waterways leading SE. to Changshu Ku, S. to Wusih, and SW. to Changchow Ku. There is a wooden landing-stage in the Yangtse at Kiangyin, but it is under the cross-fire of two batteries. The stopping-place for river steamers is on the opposite bank of the Yangtse.

There is a post and telegraph office at Kiangyin. The cable from Shanghai to Peking crosses the Yangtse at Kiangyin.

Distances from Kiangyin

		miles	
To Changshu Ku	by water	40	Route 13
Wusih	,,	23	,, 14
Changchow Ku	,,	24	,, 15
Shanghai	,,	105	
Chinkiang	,,	60	

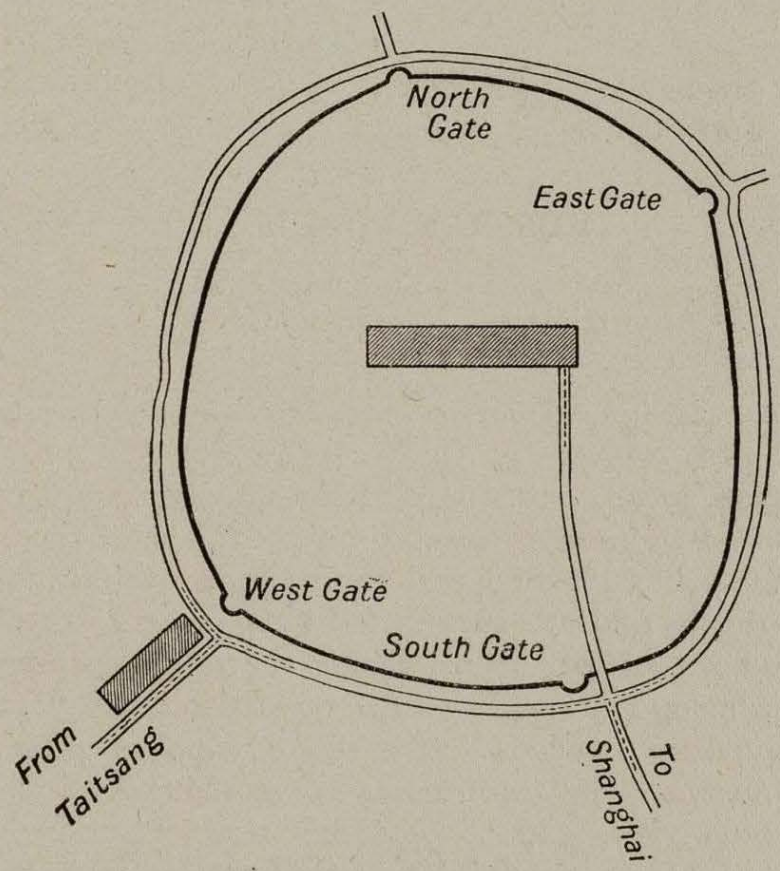
KIATINGHSIEN. (See Plan)

Approximate { Latitude, 31° 22′. Longitude, 121° 17′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Kiatinghsien, locally pronounced Ka-ting-yüen, is a walled city of the usual type. The walls are about 20 ft. high, 4 miles

KIATINGHSIEN.



Sketch Plan. Dotted lines in canals show where boats are likely to be found. Shading shows business quarters.

in perimeter, in fair repair, and are surrounded by a moat 10 or 15 yds. wide and 2 to 8 ft. deep. There is an extensive suburb on the north, and small suburbs outside the other gates.

The surrounding country is a flat plain intersected by waterways.

There is a post office.

Distances from Kiatinghsien

		miles	
To Shanghai	by water	25	Route 7 D
Taitsang	,,	17	,, 7 D

KUNSHAN. (See Plan)

Approximate { Latitude, 31° 21′. Longitude, 120° 59′. Height, sea-level.

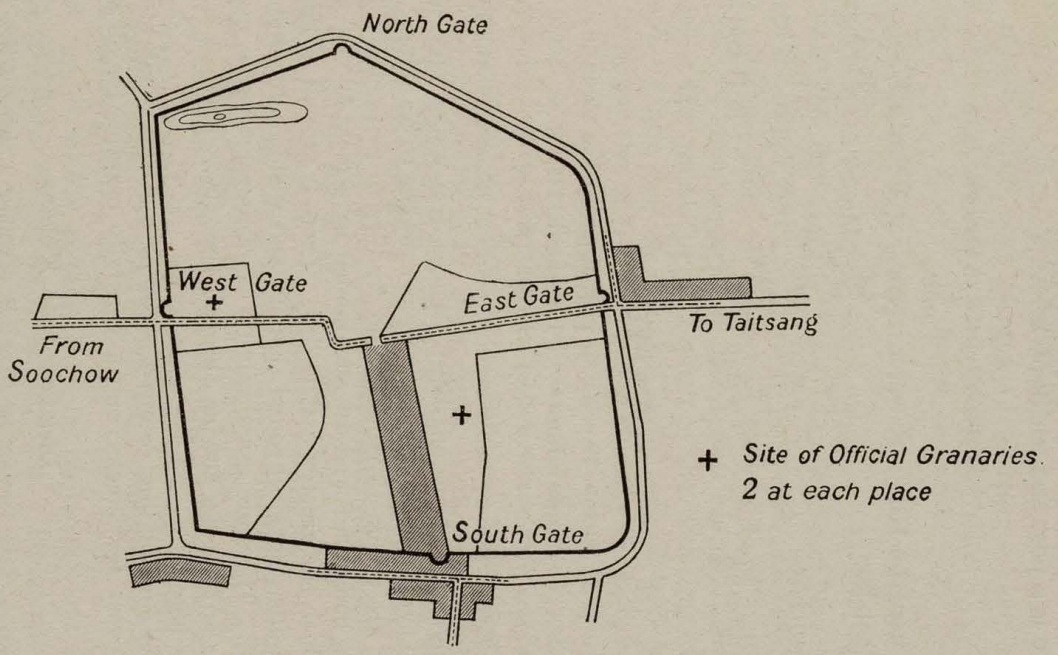
Authority: mainly Military Report on the Province of Kiangsu (South), 1909.

Kunshan, locally pronounced K'un-sän-yüen and by Europeans called Quinsan, is a walled city of the usual type. The walls are about 20 ft. high and 4 miles in perimeter : they are in bad repair, and are surrounded by a moat 10 to 60 yds. wide and 2 to 15 ft. deep. Inside the city, near the NW. corner, a steep hill rises to a height of about 270 ft., and is surmounted by a pagoda. It is the only eminence for many miles round, and its top forms a commanding position from which good views can be obtained in all directions. This hill could be easily defended, and the temples on its summit and sides and at its bases would give accommodation for about $1\frac{1}{2}$ battalions. There is no water on the hill itself, but there is an ample supply in the creeks at its foot.

Kunshan lies in the middle of a flat plain intersected by numerous waterways.

Communications.—Kunshan is served by numerous launch routes—to Soochow, Changshu Ku, Taitsang, and Shanghai, and by the Shanghai–Nanking Railway.

KUNSHAN.



Sketch Plan. Dotted lines in canals show where boats are likely to be found. Shading shows business quarters.

The railway station is situated $1\frac{1}{4}$ miles south of the city. There is a post and telegraph here.

Distances from Kunshan

		miles		
To Changshu Ku	by water	25	Route	9 B
Shanghai	,,	48	,,	5 B
,,	rail	31·95	,,	—
Soochow	water	20	,,	5 B
,,	rail	21·52	,,	—
Taitsang	water	8	,,	5 B and 7 A

KÜYUNG

Approximate { Latitude, 31° 55′. Longitude 119° 8′. Height, 100 ft.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Küyung, or Chü-jung-hsien (Wade), is a walled city of the usual type, on the main road from Tanyang to Nanking. The walls are about 18 ft. high and 2 miles in perimeter. They are in bad repair, and are surrounded by a moat 10 yds. wide, of which the greater part is dry. There is ground as high as the walls nearly all round the city and within a few hundred yards. There are practically no extra-mural suburbs, nor are there any creeks flowing through the city. There is a post office here.

The surrounding country is rolling and somewhat broken, with very few creeks, and is generally passable for all arms.

Distances from Küyung

		miles		
To Nanking	by road	27	Route	17 B
Tanyang	,,	$26\frac{3}{4}$	,,	17 B
Chinkiang	,,	43	,,	17 B

LIYANGHSIEN

Approximate { Latitude, 31° 24′. Longitude, 119° 32′. Height, sea level.

Authority: mainly Military Report on the Province of Kiangsu (South), 1909.

Liyanghsien is roughly circular in shape. The main street goes from the East to the West Gate, crossing the canal through the centre of the city by a stone bridge. This street is about 1,100 yds. long. The city wall is about 25 ft. high, the lower part of stone repaired in places with bricks; parapets of brick. The wall is in good repair. The Wên-ting River, which flows from west to east, has been diverted, and forms a moat round the city with another channel through it, all three channels reuniting at the south-east corner of the city. The moat is about 20 yds. wide and 7 ft. deep, passing under stone bridges, about 11 ft. above water-level, opposite the four city gates. Channel through city passes through west and east water-gates, each about 14 ft. above level of water, with channel 12 to 15 yds. wide, and passes under one high stone bridge in centre of city and two low stone bridges (under 10 ft. above water-level) near east water-gate. The water-gates are about 900 yds. apart; and there is a three-storied pagoda above the east water-gate.

Apart from the two water-gates there are four city gates, the East Gate being in the north-east part of the city and north of the east water-gate, whilst the West Gate is in the south-west part of the city, south of the west water-gate. The city gates are defended by an outer semicircular bastion with a second gateway in the centre.

The city is thickly populated inside the walls, and there is a large suburb extending west and south. The streets are very narrow and dirty, the main street paved with slabs and very slippery in wet weather. The houses are of brick and stone with tiled roofs; a few of the poorer of mud with thatched roofs.

The district is chiefly given up to rice, with some mulberry plantations ; fishing is also a great industry. The inhabitants are mostly Kiangsu men, with a colony from Anhwei. The magistrate states that there are 4,000 houses in and around the city. They estimate six people to a house, which would give a **population** of 24,000.

Grass hills 500 to 800 ft. high, bare of trees, lie about 3 miles to the south-west ; higher ranges run from them in a southerly direction.

Supplies.—Shops are plentiful. Eggs are scarce.

There are no resident missionaries ; but there is a Catholic mission station.

Transport.—There are no carts, but there are a few wheel-barrows, and some people go by land to the Barriers, though the water route is the commonest. Two ponies and one donkey were seen in the city in 1908 ; donkeys are said to be plentiful in the hilly country farther south, but ponies and mules are said to be scarce. Water-buffaloes are plentiful in the surrounding country.

Communications.—A steam-launch runs regularly to Wusih, going one day and returning the next. About the end of November, 1907, a steam-launch was also started westwards from Liyanghsien to the Barriers (Tung-pa), and another north to Kintan Ku. There is a post and telegraph office.

Distances from Liyanghsien

		miles	
To Loshe	by water	62	Route 16
Wusih	,,	71	Routes 16 and 1 A
Ihing	,,	22½	Route 16
Hsia-tung-pa-chên (the Barriers)	,,	28¾	,, 16
Kaoshun	,,	41½	,, 16

NANKING. (See Plan in separate case)

Approximate { Latitude, 32° 5′.
Longitude, 118° 49′.
Height, 120 ft.

Authorities: China, Maritime Customs, Decennial Reports; Yangtse Kiang Pilot, 1914; Imp. Japanese Rlys., Official Guide, vol. iv, 1915; Directory and Chronicle for China, &c., 1916; Richthofen, China, vol. iii, 1912, p. 714.

Kiang-ning-fu, popularly known as Nanking (the southern capital) and recently officially called Kiang-ning-hsien, is situated on the right bank of the Yangtse, the nearest point in the walls being about 1,000 yds. from the river. Nanking was the capital of China from A.D. 317–582 and again for 35 years at the beginning of the Ming dynasty, viz. from 1368 to 1403. During this latter period the present walls were built. They vary from 30 to 70 ft. in height, and have a length of about 26 miles with a thickness of 20 to 40 ft., making the largest walled city in China. The ancient city was much smaller, and occupied the southern central part of the present enclosure. Under the late Manchu dynasty Nanking was the seat of the viceroy of the three provinces Kiangsu, Anhwei, and Kiangsi. In 1853 it was captured by the T'ai-p'ing rebels, and was the headquarters of their chief Hung Hsiu-ch'üan for 11 years. In 1911 it was taken by the revolutionaries, who established there the provisional government.

The shape of the city is roughly triangular, and it is practically surrounded by water in the form of river, creeks, and lakes, the only appreciable gap being in the hilly region in the centre of the east side. At one time it is said to have contained three million inhabitants; but the ravages of the T'ai-p'ing rebellion left it almost desolate, and its recovery has been slow, the present **population** being estimated at about 368,000. The northern half of the enclosure is mainly cultivated land interspersed with temples and graves and the grass-grown ruins of old palaces; and the populous parts of

Nanking are confined to the south and south-west portions of the city.

The **port** of Nanking is Hsia-kuan (see below) on the right bank of the Yangtse, from which there are two main avenues of approach to the city. The first is the Kiang-ning or **City Railway** which starts from the river and runs for 8 miles to the southern part of Nanking. Crossing the north wall on the west side of the Chin-ch'uan-mên it runs south-east for $\frac{7}{8}$ mile to San-p'ai-lou station: thence another similar distance to Ting-chia station, and 1,000 yds. on to Wu-liang-an station. From here it continues past the Drum Tower on the right, bending due east for $\frac{7}{8}$ mile below the Chi-ming-ssŭ hill on the left, and then turning sharply south between the Wu-miao (temple) on the left and a large barracks on the right. It proceeds south for 2,000 yds. through the old Manchu garrison quarters, past the artillery barracks on the left to the Tu-tu-fu station which is opposite the civil governor's office on the right. Thence it runs straight SSW. for 2,000 yds. to the terminus at Chung-chêng-chieh.[1]

The second is the macadamized carriage-road called the **Ma-lu** which was built by the viceroy Chang Chih-tung in 1894. It runs from the Yangtse bank through Hsia-kuan, crossing the creek by a swing bridge and entering Nanking through the I-fêng-mên near the north end of the west wall. It then turns SE. past the cavalry barracks, the Naval Academy, the British consulate, and the Agricultural College, to San-p'ai-lou station, and thence along the west of the Kiang-ning Railway past the American and German consulates and the Diplomatic Bureau to the Japanese consulate beside the Drum Tower. Thence it continues past the Viceroy's Yamen to the boundary of the Tartar city and south to the T'ung-chi-mên in the south wall.

The chief entrance in the south is the Chü-pao-mên, from which a main street runs almost due north for about $2\frac{1}{4}$ miles through the populous part of the city; and parallel to this

[1] This street is named Chung-cheng-*kai* in the accompanying plan, *kai* being the local pronunciation of the Pekingese *chieh*.

are three main avenues with a network of smaller streets between. The Chung-chêng-chieh runs at right angles to the main street. The southern half of the city is threaded by numerous small creeks.

The **walls** are pierced by 15 gates, nine of which are generally open. There are six on the west side, three on the south, two on the east, and four on the north. Near the west wall flows a branch of the Chin-huai River which empties into the Yangtse at Hsia-kuan. It serves as a moat, winding round the south wall as far as the T'ung-chi-mên where it turns SW., though the moat is continued by a creek round the SE. angle and part of the east wall. From the Ch'ao-yang-mên in the east wall to the T'ai-p'ing-mên below the Hsüan-wu Lake there is a gap in the water barrier, about $2\frac{1}{2}$ miles in length, only broken by two small lakes. Between these there is hilly country, the most prominent points in which are the Chung Shan, a commanding height outside the walls, and the battery hill Fu-kuei Shan within. The latter is continued in a hilly ridge westward as far as Wu-liang-an station along the southern shore of the Hsüan-wu Lake.

The Hsüan-wu Hu is a lake, $2\frac{1}{2}$ miles long by $1\frac{1}{2}$ at its widest part, which flanks the wall from the T'ai-p'ing-mên to the Shên-ts'ê-mên at the NE. corner.

Along the north side of the city creeks and small lakes form an almost continuous chain on the exterior ; and at the NW. corner the wall encloses the Shih-tzŭ Shan or Lion Hill on which are a battery and signal station. From here to the Han-hsi-mên, or about two-thirds of the way down the west wall, extends an open hilly country, within the walls, with the Ch'ing-liang hill at its southern end. Half a mile north of this hill, and close to the Ts'ao-ch'ang-mên, is a powder-magazine.

The rectangular salient in the SW. and the triangle in the SE. corner are thickly populated. Above the latter are the ruins of the Ming-ku-kung, the palace of Hung-wu, with a walled enclosure about $\frac{1}{2}$ mile square. The SE. corner of Nanking was occupied by the Manchu quarters which were

sacked and burned in the revolution in 1911. The open ground north of this, extending from the walls on the east to the railway on the west, is devoted to the military, and includes infantry, artillery, and engineers' barracks, the military primary school, exercise grounds, and the Fu-kuei Shan battery. Between the Hsüan-wu Lake and the railway the ground is open and studded with pools and creeks; and NE. of San-p'ai-lou station is the racecourse and public park. A prominent landmark near the SW. end of the Hsüan-wu Lake is the Pei-chi-ko, a hall and pagoda on the Chi-ming-ssŭ hill, and formerly the site of an observatory under the Yuan and Ming dynasties.

Nanking enjoys a moderate **climate,** with 20 days' less rainfall than Shanghai. The rainy season comes on between April and May. Much has been done under the Republic to improve the city by building new roads and repairing the drainage. There is no water system, and, as the well-water is salty, drinking-water is obtained by filtering the river water, which should be used with the greatest caution.

The chief **industry** of Nanking is satin-weaving. The commerce of Nanking has been relatively small hitherto, most of the foreign trade being in the hands of the Shanghai merchants. It is probable, however, that in the future Nanking's commercial importance will be enormously increased, owing to its favourable geographical position and improving communications. It is accessible to the largest ocean-going ships at all times of the year. It is conveniently situated for the traffic of the Yangtse and its tributaries, for that of the Grand Canal, and through it that of the Huai River system. But it is chiefly to improved railway facilities that Nanking will look for her future prosperity. The Shanghai–Nanking Railway and the Tientsin–Pukow Railway are already working. The survey of a third line from Nanking to Changsha has already commenced, which will link up Nanking and Shanghai with the Canton–Hankow Railway. This line will be known as the Ning-Hsiang Railway. Other projected lines, the Lanchowfu-Haichow Railway and the

Pukow-Sinyangchow Railway, should make Nanking the most important railway junction in Central China and bring to it the important trade of Shansi and Honan.

Nanking is a great literary centre. The government schools and colleges train a large number of candidates for the civil and military services. The civil schools at Nanking include a normal school, a college, a school of agriculture, a polytechnic, a middle school, a police training-school, and a law school and several missionary institutes, for which see below, p. 482.

The arsenal and powder-mills are situated just outside the South Gate.

Nanking was opened to foreign trade in 1899.

Surrounding country.—The Yangtse curves in a north-easterly direction past the NW. corner of Nanking, at which point it is about 1,000 yds. from the city wall. The river is here about 1,200 yds. wide and very deep. There are no bridges and the connexion with Pukow, on the left bank, is kept up by a ferry. Above and below Nanking there is an island in the river, and a third island is formed along the west side of the city by a fork in the Chin-huai tributary. Apart from these islands the country round Nanking on the right bank of the Yangtse is undulating agricultural land, with stately ranges of hills rising from it. To the north of Nanking stretch the North Mountains rising to 600 ft. The country between them and the city is covered with corn-fields and cotton-fields, tea and mulberry plantations, and fruit-trees. Communications are rendered difficult by woods and ravines as well as by lakes and ditches.

The most interesting of the hill ranges is Chung Shan (local, Tsung Shan) on the east, a granite hill about 760 ft. high, the outlying spurs of which are included in the city wall. At the SW. base of this hill are the famous Ming Tombs approached by the Spirit Avenue. Four rows of hills run southerly from Chung Shan and parallel to the eastern face of Nanking. They form deep valleys which would serve to cover an approach toward the town from the east. South-east of the city are

the East Mountains (780 to 930 ft.), of red sandstone and bare of vegetation. Between them and the city the country is flat, but the view is obstructed by dykes and numerous villages and trees. On the south is the southern group of hills, at a considerable distance, though the spurs run out to within a mile of the city, forming numerous valleys with copses and rice-fields.

Roads.—The ancient road from Pukow Ku north is now merely an earthen dyke about 20 ft. wide. Along the right bank of the Yangtse is a road and telegraph wire from Hsia-kuan to Wuhu, passing through Taiping An. It is flooded in parts at high water. Two roads on raised embankments, as it were leaving the city by the River and Tartar Gates (in S. and E. walls), join to make a serviceable road, the old Imperial Way to Soochow. For goods traffic the road to Chinkiang from the T'ai-p'ing Gate is the best. Other roads for local intercourse are narrow but in tolerable condition.

Places of interest.—There are numerous places of interest in and around Nanking, such as the Ming-ku-kung, the site of Hung Wu's palace, in the SE. of the city; the Ch'ao-t'ien-kung, a splendid temple near the Shui-hsi-mên; the ancient Imperial Tombs in the city; the Ming Tombs S. of Tsung Shan; the Mo-ch'ou-hu, the Lotus Lake outside the walls W. of the Shui-hsi-mên; and the site of the Porcelain Tower outside the South Gate.

Port of Nanking.—**Hsia-kuan,** on the right bank of the Yangtse, is the port and trading-quarter of Nanking. It is situated about 1,000 yds. W. of the NW. corner of the walls and is connected with Nanking by the City Railway and the Ma-lu road. Along the river front are the hulks connected by piers with the bank. There are several of these, belonging respectively to Jardine, Matheson & Co.; the Chinese Merchants Co.; the Norddeutscher Lloyd SS. Co.; the Chinese Governor; Messrs. Butterfield & Swire; and the Japanese Nisshin Kisen Kaisha. Between the third and fourth hulk is a small pontoon used for the ferry service from

Nanking to Pukow Ku. Abreast of the Japanese hulk is a stone bund running about 700 ft. southwards. There is also a pier, for the benefit of the Tientsin–Pukow Railway ferry, about a mile north of Hsia-kuan, which is connected by a short branch line with the **Shanghai–Nanking Railway.** The pier station is called Kiang-pien.

Nanking station is on the east side of Hsia-kuan, and alongside it is Hsia-kuan station, through which the City Railway runs to Chiang-k'ou on the river bank at the south end of Hsia-kuan. The customs-house, the head post office, the Chinese telegraph office, and the German post office are in Hsia-kuan, and there are three hotels kept by British, German, and Japanese owners respectively. In July, 1913, during the military outbreak, Hsia-kuan was burnt ; but advantage has been taken of this disaster to widen existing streets and build new ones. The shipping returns for Nanking in 1915 show a total tonnage entered and cleared of 7,084,998 tons, of which about 50 per cent. was British.

Supplies.—Nanking is in the centre of a great agricultural district which produces tea, rice, wheat, oats, beans, and peas. Large flocks of ducks are kept by the farmers along the banks of the canal, and these birds, preserved in salt, are an item of export. There is abundance of fish. Fresh beef, bread, and vegetables can be obtained, and large quantities could be supplied at short notice. Forage is scarce, but good grazing ground exists on the hills. A supply of coal can be obtained ; but the Chinese burn wood, brushwood, reeds, and charcoal.

Transport.—Carriages are available on all the main streets of Nanking, and ricksha throughout the city. Donkeys are much used by natives for travelling in the country. Wheelbarrows could be obtained in large numbers.

Boats of all kinds are available on the Yangtse. For railways see *Communications.*

Government.—The civil governor's office and Civil Administration Bureau is situated opposite the Tu-tu-fu station, and about a mile SW. of it is the military governor's office. The

police office is San-fang-hang, in the centre of the south-western quarter of the city, and close to it is the High Court of Justice. There is a large police force organized on modern lines.

There is a very large garrison of northern troops maintained in Nanking.

Foreign Residents.—The proposed foreign settlement has been marked out along the right bank of the Yangtse outside the I-fêng Gate, but at present it has proved too unhealthy for occupation, and nearly all foreigners reside within the walls. The consular reports for 1915 give the number of British residents in Nanking and Pukow Ku as 170; there were 150 Japanese at Nanking in 1914; and returns for 1912 gave 150 Americans, 82 Germans, and 2 Frenchmen. There are British, American, Japanese, and German consulates along the Ma-lu in the northern part of the city.

Missionary returns give 51 men and 77 women Protestant missionaries in Nanking in 1913, and the missionary institutes include Nanking University, School of Theology, four girls' schools, a college, and a middle school. The University was opened by the Central China Mission of the Methodist Episcopal Church in 1888. There is a Roman Catholic Mission. The hospitals include a branch of the Shanghai Red Cross Hospital, American and Japanese hospitals, and a Methodist hospital.

Communications.—Nanking enjoys a variety of communications. There are roads running in various directions (see note on *Roads*). They are mostly unsuitable for heavy transport, though the country in the immediate neighbourhood is practicable for all arms. The Yangtse steamers call at Hsia-kuan, and water communication exists along the Yangtse and its tributaries, and through the Grand Canal and thence into the Huai River system. The chief Yangtse steamship lines are: Indo-China Steam Navigation Co.; Butterfield & Swire; Geddes & Co.; Norddeutscher Lloyd; Nisshin Kisen Kaisha; and China Merchants' Steam Navigation Co.

Besides the Nanking City or Kiangning Railway running

between Hsia-kuan and the city on a standard gauge line 8 miles long, there is the Shanghai–Nanking Railway running through Chinkiang and Soochow to Shanghai, a distance of 193 miles, and the Tientsin–Pukow Railway which connects with the Shantung Railway to Tsingtau at Tsinan.

Other projected railways will link up Nanking with the Peking–Hankow and Canton-Hankow lines, and with the mineral districts of Honan and Shansi, see Chap. IX, railways IX, XIII, &c.

The head Chinese **post office** is located in Hsia-kuan, where there is also a Japanese and a German post office. The Chinese telegraph office has a branch at Hsia-kuan and another at Ku-lou in the city. There is a telephone service under Chinese management, the plant of which was acquired in 1914 by one of the Chinese staff of the German firm, Siemens & Co. There is a wireless station near the civil governor's office, operating by the Telefunken system.

Distances from Nanking

		miles		
To Chinkiang via Kaotze	by land	42	Route	17 A
Chinkiang via Tanyang	,,	70	,,	17 B
Tanyang	,,	16¼	,,	17 B
Wuhu	,,	53	,,	18
Taiping An	,,	41	,,	18
Chinkiang	by the Yangtse	47		
Shanghai	,,	212		
Wuhu	,,	53		
Hankow	,,	374		
Shanghai	by rail	193		
Chinkiang	,,	43		
Soochow	,,	140		
Süchowfu (from Pukow Ku)	,,	211		
Tsinan ,,	,,	410		
Tientsin Central ,,	,,	628		

For other distances see Pukow Ku.

PAOYING

Approximate { Latitude, 33° 14′. Longitude, 119° 19′.

Authority: A. H. Hilton-Johnson, 1908.

Paoying is a walled city on the east bank of the Grand Canal, 78 miles north of the Yangtse River. Estimated population 10,000. The trace of the city is roughly circular. It is skirted on the W. and SW. sides by the canal, at a distance of about 50 yds. from the walls. The wall is under 2 miles in perimeter, and consists of the usual crenellated and loop-holed brick facing, backed on the inside by an earthen bank with a path on top of it accessible from the interior at any point. It is about 20 to 25 ft. high and in good repair throughout.

There are five gates, two in the south side and one in each of the others, called after the points of the compass. All these gateways are single, and have no protecting rampart thrown out from the wall in front. The entrances are low and narrow, and except in the case of the Hsiao-nan-mên (small south gate), which has only one, are furnished with double sets of heavy, iron-bound, wooden doors. They are surmounted by small gatehouses on the wall.

There are two water-gates, one in the south and one in the east wall. Other than the canal on the W. and SW. sides there is no regular moat.

The principal suburbs are those along the canal banks to the NW. and SW. of the city, containing over 1,000 houses. The interior is thickly built over and little open space exists. The houses are of brick, well built, and have tiled roofs. The city lies below flood-water level, and the same preventive measures are necessary in summer as those described in the case of Hwaianfu.

Surrounding country.—See under Hwaianfu.

Supplies.—See under Hwaianfu, but the supplies obtainable here would be less in proportion to size.

Transport.—See under Hwaianfu; but the numbers of boats and wheelbarrows available would here be about 100 and 300 respectively.

Government.—Paoying is a *hsien* city dependent on Yangchow, which itself is under the Tao-t'ai of Hwaianfu. The chief official is the Chih-hsien (district magistrate) whose *yamên* is inside the North Gate. There were about 60 police in the city, but no garrison.

European Residents.—There were no resident foreigners.

Communications.—See under Hwaianfu; there is a post office and telegraph office.

Distances from Paoying (West Gate)

		miles		
To Hwaianfu	by water	22½	Route	19 (1)
Tsingkiangpu	,,	31	,,	19 (1)
Kaoyuchow	,,	34½	,,	19 (1)
Yangchow	,,	66	,,	19 (1)
Chinkiang	,,	80¼	,,	19 (1)

PINGHU (Chekiang)

Approximate { Latitude, 30° 42′. Longitude, 121° 0′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Pinghu, called locally Ping-wu-yüen, is a city in the north-eastern part of Chekiang.[1]

The city is of irregular shape and is surrounded by a wall. The wall varies from 20 to 30 ft. in height, and is built of stone up to about 8 ft., whilst the upper part is of brick. It is backed by a bank, 10 to 20 ft. thick, and revetted with brick on the inside. Steps lead up on to the bank from each gate, and there are many places where the revetment has broken down and the bank has become accessible from

[1] Included in this volume for convenience.

the inside. All round the outside wall is a navigable waterway forming a moat. This moat varies from 5 to 30 yds. in width, and is on an average 30 to 40 ft. from the wall. There are five gates—the North, East, Great South, Small South, and West Gates ; at each of these the moat is crossed by a bridge. The Great South Gate and the East Gate are protected by a semicircular wall enclosing a space in front of them. The Small South Gate and the West Gate are not so protected ; the North Gate has not been inspected. At each of the two South Gates the bridge across the moat is 15 ft. long, of wood, on stone abutments.

Inside the city there are large open spaces in the western part, but the eastern part is fairly well built over. Outside the West Gate there is a small suburb stretching along the creek leading to Kashing. Outside the east face of the city there is a large suburb reaching to the waterway which connects Pinghu with Shanghai. Altogether there are said to be 1,200 houses in Pinghu, of which probably half are in the eastern suburb, which is the main commercial quarter. The population is about 8,000.

Surroundings.—The country round Pinghu is perfectly flat, highly cultivated, full of farms and villages, and much cut up by creeks. On the east and south-east, distant 150 to 300 yds. from the city, is a sheet of water 150 to 250 yds. wide, from which branch off creeks to Shanghai, Chapu and Kashing.

Supplies.—Supplies are to be got in considerable quantities in the form of rice, flour, vegetables, chickens, ducks, fish, and eggs. There is a good deal of timber in the shape of rafts on the broad waterway to the east of the town. Water is obtained from wells and also from creeks and canals. It is fit for consumption after boiling.

Transport.—There are two steam-launch companies' offices—the Wo-sing Company (Chinese) near the East Gate, and the T'ai-t'ou (Ta-tong) Company (Japanese) just north of a three-arch stone bridge which crosses the waterway to Shanghai at the northern end of the eastern suburb. One

launch should usually be found at Pinghu, as the two companies each run one launch to Shanghai on alternate days. Several hundred boats of different sizes could always be found at Pinghu. Boats are the only means of transport. There are no wheelbarrows.

Government.—Pinghu is a *hsien* city under Kashing. The military mandarin was a *Shou-pei* or captain, with a handful of soldiers for police purposes.

Communications.—Launches run daily between Pinghu and Shanghai. There is also communication, by boats up to 3 ft. draught, with Kashing, Haiyen and Chapu, but launches do not run to these places. There are post and telegraph offices in the city.

Distances from Pinghu

		miles	
To Shanghai	by water	55½	Route 3 C
Kashing	,,	19¾	,, 3 C
Chapu	,,	8	

PUKOW KU

Approximate { Latitude, 32° 8′. Longitude, 118° 4′.

Authorities: Imp. Japanese Rlys., Official Guide, vol. iv, 1915; Yangtse Kiang Pilot, 1914; Directory and Chronicle for China, Japan, &c., 1916.

Pukow Ku is a new port on the left bank of the Yangtse, opposite Hsia-kuan. It was opened to foreign trade in July, 1915, as a branch office of the Nanking customs. As the terminus of the Tientsin–Pukow line it is a place of growing importance. It is connected by ferry with Hsia-kuan; but has itself three piers and four hulks alongside which there is sufficient water at all seasons for ocean-going steamers. The piers are 300 ft. long, and two of them have cranes. There are warehouses, restaurants, inns, and freight agencies at the port, and the Chinese Government has recently sanctioned

considerable expenditure on structural improvements. The old town of P'u-chên is 2½ miles WNW. of the port. There is a post and telegraph office.

Distances from Pukow Ku

			miles		
To Yangchow	by water		57½	Route	36 A
Yangchow	by land	about	61	,,	36 B
Yangchow via the San-ch'a Ho	by land and water	,,	61½	,,	36 C
Linhwaikwan	by land	,,	98	,,	37
Linhwaikwan	by rail	,,	93½		
Chuchow An	by land	,,	33¼	,,	37 A
Lüchowfu	,,	,,	109¼	,,	38
Hochow An	,,	,,	36	,,	39
Süchowfu	by rail		211		
Tientsin Central	,,		628		

SHANGHAI (see Plan and Map No. 4 in separate case)

River Access and Harbour—British and French Settlements—The Native City—International Settlement and Hongkew—History—Population—Food Supply—Hygiene—Weather and Climate—Defence—Police—Volunteers—Fire Brigade—Government and Finance—Public Institutions—Communications—Railways—Waterways—Tramways—Industries and Manufactures—Trade and Commerce.

Shanghai (lat. 31° 15′ N., long. 121° 29′ E.), the most important of the treaty-ports and the commercial capital of the Chinese Empire, lies in the south-eastern corner of the province of Kiangsu. It is situated at the confluence of the Woosung river (Soochow creek) and the Huang-p'u (Whampoo), twelve miles above the port of Woosung, where the united streams debouch into the lower estuary of the Yangtse. If geographical considerations alone had determined the boundaries of the eighteen Chinese provinces, the alluvial peninsula on which Shanghai is situated would never have been included in the province of Kiangsu. In fertility of soil, advanced agri-

culture, density of population, number of great and wealthy cities, and skill and hand-craft of its inhabitants, the peninsula has nothing in common with the remainder of the province which runs northwards from the great river to the Shantung borders. From every point of view the two portions of the province are in marked contrast.

South-eastern Kiangsu is an alluvial gift of the Yangtse : the river visibly continues to deposit silt and detritus at an estimated rate of two square miles per annum, and is at the same time steadily raising the ocean-floor over an area of hundreds of square miles. Roughly speaking the sub-province is a triangular peninsula, bounded on the north and north-east by the Yangtse, and on the south and south-east by Hangchow bay. The peninsula resembles Holland in its origin and main physical features ; it is virtually water-logged, and only by great hydraulic engineering works has it been reduced to the service of man. There are few elevations ; 15 to 20 miles distant from Shanghai hillocks attain a height of less than 250 ft. in the Fêng-huang Shan ; they are doubtless the summits of what was an island or islands in the Yangtse some centuries back. As examples of the vagaries of the peninsular rivers, we may mention the change of character in the two streams which most intimately concern the topography of Shanghai : the Woosung river, within a well-known historical period, was quite a considerable stream with abundance of water and great scour ; it is now with difficulty maintained by artifice as a creek for very small vessels ; while its neighbour, the Huang-p'u, now apparently a natural river of great volume, originated in a mere canal for drainage purposes.

River Access and Harbour

In 1843, when Shanghai was first opened to foreign trade, the Huang-p'u had a width of 2,000 ft. at low water in the harbour, that is, opposite the settlements. Embanking, wharf-making, and the steady accretion of silt have now greatly reduced this breadth ; and the river has, during

the last half-century, been no exception to the rule that all rivers traversing alluvial country make chronic efforts to destroy themselves. So apparent did this become that the trade interests took alarm, and after the political *débâcle* caused by the Boxer rebellion in 1900 they succeeded in overcoming the inertia of the local and metropolitan officials and in establishing a River Conservancy Board.

The Huang-p'u Conservancy.—The constitution and powers of this body were far from ideal ; the aim was to make a river authority on the model of that formed for the Port of London, but the actual result was one of those compromises so dear to the heart of the Chinese official. The Chinese official has some reason for regarding bars, shoals, and Nature's impediments as heaven-sent gifts with which he may circumvent foreign aggression, and he has little or no zeal for their removal ; the native trading classes, on the other hand, see eye to eye with the foreigner in these matters. A reactionary viceroy at Nanking, one Chou Fu, was made the medium of resistance in the case of improving the Huang-p'u ; with great plausibility he admitted both the need of river improvement and his own bounden duty to bear the expense of the same. He undertook to conserve and to control the river under the skilled advice of a foreign engineer over whose appointment the foreign interests would have a vote. The 'interests' referred to succumbed to the gift ; and, delighted to escape the fiscal burden, which as beneficiaries they had fully expected to share, they accepted the viceregal scheme.

Operations of Mr. De Rijke.—Mr. De Rijke, a Dutch engineer of the highest professional standing, who had done good work in Japan and who had been consultant to the foreign merchants and the Shanghai municipality when they first broached the subject, was appointed engineer-in-chief in 1906 to work under a board consisting of the Shanghai Tao-t'ai and the Commissioner of Marine Customs. Roughly speaking, Mr. De Rijke's plans involved the removal of an inner and outer bar and the replacing of a very congested and dangerous fairway by a wider, deeper, and more easily navigable channel. The

scheme involved huge dredging operations and large land reclamations. Mr. De Rijke proceeded with the work and continued for four years, subjected during the whole period to covert opposition from the Chinese. Still good work was done; the outer bar was attacked by deviating the river's scour by means of a concave jetty or mole from the left bank to the deep water, while the inner obstruction was avoided by diverting the channel; training works, fascines, and dredging were undertaken on a large scale. The dredging alone involved the removal of between eight and nine millions of cubic yards of deposited silt.

The general result was a very marked amelioration in the navigable channel. In May, 1909, the British cruiser *Astrea*, drawing 23 ft., passed up the new channel without difficulty; and in the following July the fairway was opened for general traffic, and it has been maintained ever since. The long vexatious delays at Woosung, which often detained light-draught coasters as well as the larger ocean-going steamers, are now largely a thing of the past. The year 1910 saw the major dredging and land reclamations completed, and the closing of the old ship channel, both above and below Gough Island; but it also revealed the imperative need of further measures, if the amelioration was to be maintained and made progressive. The Chinese authorities now stated that their funds were running out, and the hidden opposition already referred to came to a head. The time synchronized with the conclusion of Mr. de Rijke's contract, and he and his staff refused to go on and returned to Europe; but only after their scheme and its results had secured the approbation of three of the most eminent consultant engineers (British) in the profession, from whom the Shanghai Chamber of Commerce had invited an independent report.

Mr. von Heidenstam.—It was impossible that a great scheme like this should remain in a state of suspense. With the approval of the foreign authorities Mr. H. von Heidenstam, of the Swedish Royal Engineers, was appointed to direct affairs, and the staff was reorganized on a smaller scale. Extensive dredging

at Pheasant Point and in the northern section of the Astrea Channel (also known as the Junk Channel) has met the more urgent needs ; but for a time the more ambitious aims of the engineering and trade interests have been in abeyance. The Maritime Customs Trade Report for 1915 (the latest information available to us) summarizes the position on December 31, 1915, as follows :

Condition of the Navigable Channel in 1915.—The latest surveys of the Huang-p'u under direction of the engineer-in-chief of the Huang-p'u Conservancy Board show that the depth of water in the channels has been well maintained, and this is supported by the fact that vessels on a 29-foot draught of water pass in and out of the port quite safely.

The following figures on the Astrea Channel, ever the crucial portion of the navigable stream, are significant :

	ft.	in.
Highest high-water (July 28, 1915) . .	32	9
Lowest high-water (Feb. 24, 1915) . .	22	1
Highest low-water (July 28, 1915) . .	28	2
Lowest low-water (Jan. 12, 1915) . .	18	0
Average high-water	27	5
Average low-water	20	8
Average range	6	9½

The above depths are for the shoalest part of the fairway, i.e. along the line of the buoys ; for the centre of the fairway it would be about right to add 6 to 7 ft.

While on this subject it may be added that the largest Pacific mail-boats still lie off Woosung, and effect their passenger and cargo traffic by the help of tenders and lighters, of which the port has an abundance. The limited extent of the harbour accommodation and the danger and difficulty of manœuvring very large ships in a congested area and a strong tide-way, will probably be a permanent hindrance to the largest vessels coming up to the wharves. This remark would apply equally to deep-draught 'transports' and armoured vessels ; but under the existing conditions of an abundance of tenders, tow-boats, steam-launches, lighters,

and flats, this would only involve very slight delay in the debarkation of a landing-force.

Woosung used to be fortified, and might on occasion have offered considerable resistance to an expeditionary force, but some years ago the guns were for the greater part withdrawn and the forts dismantled, and the town was declared a treaty-port. It now stands much in the same relation as Gravesend to London; passengers for the great liners sometimes prefer to go down by rail, and board their ship by steam-launch from the jetty.

The British and French Settlements

An examination of the attached plan will elucidate the topography of the Shanghai settlements and native city more clearly.

The British Settlement.—The original British Settlement (1843) approximately coincided with what is now known as the Central District, and was roughly the area bounded by the Soochow Creek, the Huang-p'u river, the Yangkingpang and the Defence Creek on its northern, eastern, southern, and western sides respectively. This, the oldest part of the settlement, is still the commercial centre of the whole area; all the consulates, banks, insurance offices, the offices of the leading *hongs* (business concerns), the clubs, churches, and shops (foreign and native) are located in this area of less than one square mile. Posterity has never ceased to lament the short-sightedness of the early city-fathers for saddling it with narrow roads. No one in the early days foresaw that thoroughfares varying from 30 to 60 ft., quite adequate to the small trade of those days, would lead to serious congestion when the settlement developed into one of the great world-cities. At the time the roads were made they seemed preposterously large; now that tramways and motors have arrived, and have added to the congestion due to countless pedestrians, rickshas, native wheelbarrows, and pony

carriages, the result is a density of street traffic probably unsurpassed in the world.[1]

The cost of land is now so high as practically to prohibit the policy of widening the most congested roads. In 1913 the average value of land all over the International Settlement was Taels 9,636 per *mu* (Chinese acre), in the central district it averages Taels 34,706, and in one case a price of Taels 110,000 was paid for one *mu*. Taking 6.6 *mu* to the acre, and valuing the tael at 2*s*. 9*d*., this means £100,000 per acre, a price rivalling that of most great western cities.

The settlement has been expanded westward beyond the boundary creek and the race-course till its area is considerably more than three times the original size, and of course adequate precautions have been taken to provide for future contingencies of traffic in all the new roads, which are, however, more of the residential than the commercial type. Continued extensions of the settlement are necessitated by sanitary and police considerations, but they are resolutely opposed by the Chinese of all classes on political and patriotic grounds: even the Chinese who have settled for good under the protecting aegis of the 'foreigner', as the safest means of conserving their life and property, unite in resisting the aggressive policy which they impute to the advocates of 'extension'.

The French Settlement.—The next settlement was that of the French in 1849; they at first limited themselves to the narrow strip between the Yangkingpang (creek) and the Native City, with a short riparian frontage on the Huang-p'u. This has in recent years been extended until it now covers the considerable tract to the east and south-east of the Native City (between it and the river) known as the Nantse. It should be added that the Yangkingpang creek is now being culverted and transformed into a boulevard (Avenue Edouard VII).

[1] The number of passengers carried by the tramways increased from 27,257,250 in 1911 to 55,647,238 in 1914. The number of public rickshas (all rubber-tyred) licensed in 1914 was close on 8,718, the private rickshas 5,149. Wheelbarrows were licensed in the same year to the number of 6,938; carriages, public and private, 455 and 735 respectively (both considerably decreased since the introduction of the tramways in 1908). Motor vehicles numbered 517 in 1914, of which 390 were private cars.

The Native City

The Native City, less than a square mile in extent, was originally rectangular, but is now an oval with its major axis running north and south. It has an inferior moat, and is traversed by two small creeks from west to east ; these waterways are more of a sanitary threat than a military defence ; and the same may be said of the ' walls '. Proposals for the removal of the latter and the filling up of the former have been broached ; but Chinese public opinion is not yet ripe for such radical measures, although it is slowly moving in that direction. The walls as they stand are faced with brick to a height varying from 20 to 30 ft. The wall between the New North Gate and the South Gate is backed by an earthern bank 10 yds. thick. This bank is revetted with masonry on the inside to a height of 10 ft., so that quick access to the path on the top can only be obtained at a few points. Elsewhere the bank is not more than 5 yds. thick on the top, is unrevetted, and stands at an easy slope. The usual rectangular buttress-like projections from the wall occur at short intervals. There are 7 gates of the usual type ; low and narrow, and with small semicircular protecting walls of only 10 to 15 yds. radius. In the east and south walls there are 4 water-gates admitting creeks navigable for small boats only. A moat consisting of a waterway 6 to 10 yds. wide and 1 to 8 ft. deep encircles the wall at a distance of about 20 yds. A rubbish mound about 70 ft. high in the NE. corner of the city is the only natural eminence within many miles. The city follows the usual Chinese type. The streets are narrow, badly drained, ill kept, and the traffic is at times incredibly congested. Extensive suburbs tail off to the south, and extend to the terminus of the Hangchow Railway, and beyond this to the Kiang-nan Arsenal, the possession of which is the first object of every attempt at revolution and social upheaval.

The International Settlement

In the later ' fifties ' of the last century the Americans took up in a half-hearted manner a large district lying to the north of the Soochow creek and extending down the north and south reach of the Huang-p'u, after its junction with the creek. This was generally known as **Hongkew,** and rapidly developed as the ' marine ' portion of the settlements. Docks, wharves, jetties, &c., were built ; and the whole district took on the aspect of a great port. In 1863 the British and American Settlements were combined to form the existing **International Settlement,** Great Britain and the United States having agreed to waive their special rights and to throw their areas open to subjects of all nations.

Landing Parties.—Some knowledge of the local topography would be of the first importance to landing-parties or forces, and the following points may be noted : the narrowness of the roads, not only in the Native City but in the older parts of the settlement, is adverse to the use of artillery ; on the other hand, machine-guns and fire-hose are formidable weapons against a Chinese mob. In the suburbs and country the frequency of irrigation creeks and other channels might handicap field operations unless proper precautions were taken for rapid bridging : the numerous small bridges, usually not strong enough to take heavy guns or high enough to allow boats to pass under, might hinder rather than facilitate movement.

The presence of an overwhelming native population, at once ignorant and excitable, and peculiarly susceptible to the machinations of political wire-pullers, exposes Europeans to the danger of sudden riots.

History

Ignoring myth and tradition, Shanghai first emerges into the light of history as a customs station. In 1292 it was made into a ' hsien ' or district, pertaining to the ' fu ' or ' prefecture ' of Sungkiang, which itself fifteen years previously had been separated from the ' fu ' of Kashing in the province of Chekiang. Its commercial importance for years

was masked by the greater importance of the customs barrier at the mouth of the Liu Ho some twenty-five miles up the Yangtse from Woosung. When this place began to silt up Shanghai's opportunity came, and its development was rapid. Its importance was wholly commercial; in 1832 when Messrs. Lindsay and Gutzlaff visited it from the south they counted as many as 400 junks passing in within one week.

In the so-called Opium War of 1842 a British fleet under Sir William Parker convoyed an army of 4,000 men under Sir Hugh Gough from Hong Kong, Woosung was captured, and the city of Shanghai seized. The **Treaty of Nanking** (August 29, 1842) secured that Shanghai, Ningpo, Foochow, Amoy and Swatow should become treaty ports; and in 1843 the actual settlement at Shanghai was delimited by Captain Balfour, the consul, and a beginning was made. In 1849 twenty-five foreign firms or *hongs* had established themselves, and the population of westerners amounted to 100. The French came in 1849, and later on extended their small settlement by purchase. In 1899 they got a further extension by treaty, towards Sikawei, the goal of their ambition.

In 1901, after the Boxer rebellion, a large expansion was gained, and the municipal government of the International Settlement was extended over an area of 5,584 acres, with, at the time, a density of population of 92 per acre (59,000 per square mile).

In 1896 the **Treaty of Shiminoseki** gave Japan the right to a separate settlement in Shanghai; but although the Japanese population is now large (3,361 in 1910, but much increased in the last six years) the policy has not matured in any way. Present needs point to an extension in the northern district of Paoshan, and to some control on the Pootung side, where vast foreign commercial interests are at the mercy of a rowdy and often hostile population.

The commercial progress of Shanghai was slow until the **Treaty of Tientsin** in 1861 secured (*a*) the opening of the Yangtse ports; (*b*) the opening of the northern ports of Chefoo, Tientsin, and Newchwang.

The most remarkable features of its local history may be referred to, as they illustrate the anomalous attitudes and policies which the Chinese authorities adopt in their dealings with foreigners. Consul-General Rutherford Alcock in 1848 had a dispute with the local mandarins on the old subject of the ill-treatment of missionaries, and, by a blockade effected by a single British gun-brig, prevented 1,100 grain-junks from sailing with the annual supply of tribute rice to Tientsin for Peking. The reprisal was phenomenally effective.

The Native City was seized by the Triad rebels in 1853, and held for seventeen months in defiance of the Imperialists, then exhausted by the long struggle of the **T'ai-p'ing rebellion.** This brought great numbers of Chinese of all classes into the settlements for protection, and caused a boom in real property. As the demeanour of the encamped Imperialist troops was a constant threat, a local volunteer force was enlisted by Captain Wade (the germ of the Shanghai Volunteer Force), and co-operating with a landing-force of seamen, it expelled some 10,000 Chinese braves from their quarters and burned their camps. This feat of arms was known as the 'Battle of Muddy Flat': three foreigners were killed and ten wounded.

The Taipings were the next to threaten the settlements and, after the fall of Soochow in 1860, the menace became grave, all the more so as it was known that vast numbers of wealthy Chinese had again fled to the settlements as a sure refuge. British and French marines were landed in some force, and an Indian infantry regiment was placed on guard on the walls of the Native City. These precautionary measures temporarily succeeded in keeping the Taipings away from the immediate neighbourhood of the city and settlements; but they soon came on again, and in December attacked the city and threatened the settlements. It was on this occasion that the **Defence Creek** was constructed, and all the approaches to the settlements barricaded. The danger passed, and in 1862 the foreign soldiery had command of the suburbs for

a distance of thirty miles out. It was this condition of affairs which brought about the well-known foreign legion which became the nucleus of the **'Ever Victorious Army'**. Originally enlisted for Chinese service under an American citizen named Ward, they consisted chiefly of deserters from ships, of ne'er-do-weels, and penniless adventurers. Ward, a man of singular ability and force of character, was unfortunately killed in action ; and the command of the mercenaries was then given to another American soldier of fortune named Burgevine, of a wholly different type, who first quarrelled with the Imperialists and then transferred his services to the Taipings. The Chinese, finding it impossible to control its foreign corps, at last acquiesced in the suggestion of Sir James Hope and gave the command to a British officer, **Major Charles George Gordon, R.E.** Under his leadership the force became disciplined, and materially assisted the Chinese under Li Hung-chang to quell the rebellion completely. In 1867 the **British garrison**, after a seven years' stay, was finally removed from Shanghai : it had consisted of one British and two Indian regiments, and a battery of artillery.

Most of the other seditions which gave trouble were strictly local, and have been within the ability of the municipal forces (volunteers, police, and fire brigades) to deal with. In 1874 there was a serious riot in the French settlement, due to disturbing a grave-yard in a matter of public works. In 1894 a huge fire ravaged the Nantse, and prepared the way for indefinite Bund improvement, which was finished in 1897. This imitation of foreign procedure was carried further, for a Chinese Council to supervise civil and municipal administration was set up, and road-making and policing on foreign lines were adopted.

In 1897 the imposition of a wheelbarrow tax raised a dangerous riot, but the local forces, acting with a landing-party of seamen from the men-of-war, were able to deal with it.

In the **Boxer rising** of 1900 four of the Great Powers landed troops in Shanghai in case of need, which happily never arose ;

and for two years the settlements were again garrisoned by foreign troops.

The suppression of the **Ningpo joss-house** by the French led to a similar riot in 1908. The lesson of these incidents is that Shanghai has now a large population of the *canaille* type, the ignorance and prejudices of which the Chinese authorities, if so disposed, can use to good or evil purposes at will.

A difference of opinion with regard to the jurisdiction of the British Assessor in the Mixed Court led to serious trouble in 1908. Seditious posters were put up by the malcontents, and a general strike and a boycott on the part of the Chinese were threatened, while foreigners were badly molested in the streets : still more serious, determined attacks were made by rowdies on the police stations, and arson was resorted to. Only the timely arrival of the Volunteers and a landing-party and the shooting down of some rioters at a critical moment saved the situation.

The revolutionary movement of 1912 has affected Shanghai only to the extent that the party against the Government invariably tries to seize the Kiang-nan Arsenal, and the shelling and cross-firing consequent on these attacks have endangered both the outlying districts and the foreign property in Chinese territory.

Population

The number of foreigners in the two settlements in October, 1915, was 20,924 ; 18,519 in the International Settlement, and 2,405 in the French Settlement. Of this total 11,691 were males and 9,233 females. The census included the outside roads and Pootung

The nationalities in the International Settlement included :

Japanese	7,169
British	4,822
Portuguese	1,323
American	1,307
German	1,155
Indian	1,009

Russian	361
French	244
Spanish	181
Danish	145
Austro-Hungarian	123
Italian	114
Other Europeans	478
Other Asiatics, &c.	90

During the last few years the increase of the Japanese has been the most striking feature of the growth in the foreign population.

The **Chinese population** of the International Settlement, polled in 1915, was 620,000. The figures of the Chinese population of the International Settlement since 1870 in periods of five years are :

1870	96,000
1875	108,000
1880	126,000
1885	168,000
1890	241,000
1895	345,000
1900	452,000
1905	?
1910	488,000
1915	620,000

The Captain Superintendent of Police says in an official report that he has good reason for thinking that these figures *understate* the density of the Chinese population, and he is of opinion that nearly three-quarters of a million work within the settlement limits.

The Chinese population of the French Settlement was :

1890	34,000
1895	45,000
1900	80,000
1905	84,000
1910	102,000
1915	146,000

The population of the Chinese city, like that of all other great towns in the Empire, can only be guessed at. The Chinese social unit is not the person or individual, but the *family* or household ; and the number of heads can only be obtained by multiplying the number of households by a rough average figure denoting the number of souls in each family. On this crude method the population of the Native City may be reasonably guessed as lying between the limits of 400,000 and 500,000. It will thus be seen that there is every reason for concluding that well over one million Chinese live and work in the Shanghai area.

The **death-rate** for Europeans varies greatly : it changed from 11·2 per thousand in 1905 to 21 in 1912, 21·5 in 1913, and 22 in 1914 ; that of the Chinese varies quite as much over a long period, but has shown a recent tendency to improve : it was as high as 30·9 per thousand in 1903, but only 13·8 in 1911, 15·8 in 1913, and 16·2 in 1914.

The birth-rates as factors of population are completely masked in the cases of foreigners and natives alike by the figures of immigration.

Food-Supply

The food-supply of this vast aggregate of human beings presents no difficulty. Luxuries such as European wines and the higher grades of Western food and condiments are imported ; flour is imported in huge quantities from America, though China itself is increasingly a wheat and grain producing country, and large flour-mills with modern machinery and an enormous output have been established quite recently around Shanghai. Rice in vast quantities comes down the river from Wuhu, which claims to be one of the largest rice-exporting dépôts in the world. Meat, venison, poultry, and game of every variety are found in the country ; and modes of supply (even cold-storage) and transit have been specially organized to meet the ever-increasing demands of Shanghai. The same may be said of every variety of European and

Eastern vegetable, and of many Western fruits. Tropical fruits come in large quantities from the South, while Chefoo and the North send grapes, apples, pears, peaches, apricots, &c., &c. Food is cheap and abundant, and in the Shanghai district a large force could find its supplies without much oversea transport. The Chinese are good fishermen, and there is an endless supply of all sorts of sea and fresh-water fish at all seasons of the year. The shot-gun can in most districts add liberally to the larder; and snipe, duck, pheasant, partridge are abundant in their seasons near most treaty ports. Larger game, as deer, wild boar, &c., can be shot by going farther afield.

Hygiene

There is an admirably organized and administered health-officer's department which does great a work in preventive medicine as well as in the ordinary routine work of public hygiene. At one time the presence of an immense and dense Chinese population, utterly devoid of all sanitary knowledge, was a constant menace to the health of the settlements; but gradually and with caution, native prejudices have been overcome in many phases, and it may now safely be said that the Chinese are as immune from certain of the zymotics or dirt-diseases as the foreigners themselves (from 1908 to 1914 they had much smaller death-rates). Small-pox, for example, is no longer more mortal to the Chinese than to the European. The zymotic diseases are treated as in England, and 'notification' and segregation are practised with fair success, even among the Chinese, who are adepts in the art of concealing infectious cases.

Anti-mosquito procedure is practised to reduce malaria, and rat extermination is steadily maintained as a preventive against bubonic plague. A well-equipped and finely officered bacteriological laboratory carries on the manufacture of all the serums and anti-toxins known to modern medicine.

Dysenteric and choleraic diseases are endemic, but fre-

quently appear as epidemics among both Europeans and Chinese: the Health Officer wages constant warfare against them by pamphlet and precept on the subjects of personal and food cleanliness. Bubonic plague has been a serious menace for some ten or fifteen years, but so far has not matured as an actual epidemic of pestilence. Tuberculosis is, however, *the* mortal foe in Shanghai, and probably kills more (Chinese) than all other diseases put together. The extreme overcrowding of Chinese and their personal habits of life render this the most difficult of all diseases to combat, seeing that abundance of fresh air is the chief palliative and cure. It must be noted that Sikhs and Indians are extremely liable to pulmonary tuberculosis, and that in their case the disease is very rapid in its progress and has a high mortality.

Shanghai is no exception to Eastern cities in the virulence and danger of venereal diseases.

Defence

Defence and protection have ever been absorbing considerations to those responsible for the consular and municipal government of the settlements. The mere fact that a handful of Europeans are in the midst of an alien civilization and race renders explanation unnecessary. Men-of-war of all nationalities frequent the port, and as a rule there are three or four third-class cruisers and gunboats in the harbour, while often larger armed vessels and even fleets are to be seen at the deeper anchorages below Woosung. These vessels in great and sudden crises can send ashore large and well-armed landing-parties. In times of anxiety and impending trouble, the war-ships flock to Shanghai, and their arrival and presence exercise a very marked steadying influence. But generally speaking, Shanghai depends on itself for its normal protection. The protective forces consist of (1) police, (2) volunteers, (3) fire brigade. Details are given of each in the Municipal Report under the heading of Watch Matters. We shall confine ourselves to a brief summary dealing chiefly with numbers.

Police.—The 'actual' strength for 1914 was :

(*a*) *Foreign Branch :*—230, exclusive of the commissioned officers in command, and 29 men who left for war service at home.

(*b*) *Sikh Branch :*—572, of whom 457 were in the constabular force and 115 in the Gaol service.

There were also in 1914 as many as 397 Sikh watchmen in private *hongs* ; they are under police supervision, and available for help in certain contingencies. Many of these men are ex-soldiers. The Sikh police are under military discipline. Twenty-five of them are mounted and act as troopers.

(*c*) *Native Branch :*—These numbered 1,116, of whom 82 were sergeants.

The whole force is under the command of a captain-superintendent, responsible to the Watch Committee of the Council. The captain-superintendent is a British Army officer (retired or on furlough), and he is assisted by a staff of officers (usually military men) and cadets. A useful and efficient part of the force is the Criminal Investigation Department.

The police force is allocated to nine different dépôts, and averages one constable to every three acres and 270 head of population. The above figures do not include the French force of 54 Europeans, 141 Tonkinese (slowly being increased), and 226 Chinese constables.

The effectiveness of the policing of Shanghai is seen in the general security of life and property : but in the case of danger to Europeans arising from any source which involved Chinese national sentiment, or where intimidation could be brought to bear, it might be unwise or even disastrous to place confidence in the native constabulary. In the cognate case of Tientsin in the Boxer rising, the native police with one single exception deserted, and only reappeared on the foreign side when the political wind had completely changed : on the other hand, in the same rising, the men of the Wei Hai Wei regiment to a man remained faithful, and did some useful service.

The Volunteers.—These are armed, uniformed, and maintained by the Municipal Council. On December 31, 1914, they numbered 1,192. They were formed into light horse (43), artillery (39), Maxim battery (31), engineer company (44), and infantry, of which the companies are 'A' (113), 'B' (61), 'The Customs' (28), 'The Germans' (102), 'The Americans' (56), 'The Portuguese' (79), 'The Japanese' (51), 'The Chinese' (95), 'The Austro-Hungarians' (33), 'The Scottish' (68), 'The Italians' (39), 'Buglers' (19), 'Reserve Company' (123), 'Light Horse Reserve' (21), 'Special Reserve' (123). The Council gives commissions, and provides every facility for efficiency in the way of rifles, ammunition, shooting-range, drill-hall, &c. It also invites a general officer of high standing up from Hongkong every year to inspect and report.

There is also a volunteer force under the auspices of the French Municipal Council, and this body would act in close co-operation with its neighbours for all purposes of attack and defence in critical times.

The Fire Brigade.—This is a volunteer body, led by a professional fire 'expert', and it exists primarily for security against fires. It had as many as 161 'calls' in 1914, of which 138 were within the settlement limits; and its record in dealing with fire extinction is almost unique for a volunteer brigade. But although its work in ordinary times is exclusively civil, it is not to be ignored that in times of crisis it might possess high value for 'defence' in another sense. There are at present four companies or units, each with its own dépôt and gear located in different districts. The Brigade on December 31, 1914, was 49 strong, with an additional 18 men on leave at home on war service. There is active co-operation with a similarly organized and efficient institution on the French side.

Government and Finance

British subjects are in matters of law subject to the direct control of their own **Consuls,** and to the jurisdiction of a **Supreme Court,** which dates from 1865. There is one judge and

one assistant judge, and arrangements have been made for them to sit *in banco* with the brother judges in Hong Kong and take appellate cases, to save the expense and delay of appeals to London. There is practically no imperial taxation for British subjects in Shanghai or the China outports : the small sum of $2 per head of household is paid annually as a registration fee, and this is all. The Consulates, however, are in some measure self-supporting from stamps and fees pertaining to bills of lading, land registration, certificates, transit passes, &c.

Similar conditions apply to the nationals of other Powers. On the other hand, there is practically ' home rule ' as far as local or **municipal government** is concerned. A council of nine is elected every year, and the duties of road-making, lighting, police, public health, and taxation are wholly undertaken by this body. In 1914 the actual **revenue** collected amounted to Taels 2,934,381.

The ordinary **expenditure** for the same year amounted to Taels 2,700,218, giving a surplus of Taels 234,163. The leading details of this expenditure were as follows :

	Taels.
Volunteer Corps	55,701
Fire Brigade	69,856
Police	920,791
Health Dept.	187,984
Public Works	705,133
Public Band	51,630
Education	93,476
Public Library	2,326
Finance	72,485
Secretariat	156,451
General Charges	108,239
Interest on Loans	124,932
Redemption of Loans	151,210

Some of the greatest difficulties of the Council arise in connexion with the police administration. Just as all foreigners are subject in law to the consular authorities of their own country, so are the Chinese amenable only to the laws of

China, and can be tried only by their own officials. Herein lies the germ of all trouble ; the writ of the Chinese officials does not run within the limits of the settlement, and only the municipal police can effect arrests. There are, however, hundreds of municipal sanitary and police regulations and by-laws, the non-observation of which is punishable by fine on summary procedure. To meet the exigencies of this anomalous state of affairs and of litigation between foreigners and Chinese, a **Mixed Court** was established in 1864. It is in essence a Chinese Court presided over by an ' official ' with the rank of subprefect : with him sits as assessor a foreign consular official, who watches the case in the interests of his co-nationals in particular, and of justice in general. Penalties of imprisonment for crimes committed *in the settlement* are carried out in the Council's prisons.

A **Court of Consuls** selected by the consular body annually was created in 1870, for enabling Chinese to sue the Municipal Council in cases of alleged grievance.

The code by which the foreign population secures the management of its own municipal affairs is known as the **Land Regulations.** Originated in 1854, they were amended in 1870 and again in 1898 ; the **franchise** is that ratepayers who pay on an assessed rental of Taels 500, and owners of land valued at Taels 500 have a vote. The Council elects its own chairman, vice-chairman, and committees. The duties have become exceedingly exacting, and it says much for the public spirit of Shanghai that men come forward year after year to undertake them. The French Settlement has a Council with powers similar to that of the international, but with this all-important difference, that none of its decisions have effect till approved by the French Consul-General.

The decisions of the Municipal Council are in many matters subject to the veto of the consular body ; and it is a long-standing grievance that the *doyen* of this body may perchance be the representative of some minor power which has very little stake in China, and no national interest in the questions submitted to him for transmission to the diplomatic

body in Peking, or for the consideration of his colleagues. Even if he be not *doyen*, his voice and vote may be as potent as those of the British Consul-General representing vast national and commercial interests.

The consular body does not always see eye to eye with the Municipal Council, and there have been occasions when its conclusions have been overridden by the ministers in Peking. Generally speaking, the system of municipal government in Shanghai works smoothly, notwithstanding all sorts of difficulties inherent to the situation, and a tradition of good honest government has been created.

Public Institutions

In the way of churches, clubs, philanthropic associations, libraries, horticultural and kindred societies, playing fields, public gardens, and sporting clubs of every description, Shanghai is probably better supplied than most western cities of equal standing and size. The General Hospital, the Victoria Nursing Home, and children's schools are well organized. A proper drainage system presented great engineering difficulties, but they were overcome ; and the water-supply is thoroughly adequate to public and domestic requirements. The municipal markets are admirably administered.

Communications

Shanghai is virtually a metropolis situated at the centre of the littoral of a country which contains the greatest number of citizens in the world. Ten years ago the communications of this country were entirely maritime and aquatic ; and even now **roads,** strictly so-called, hardly enter into the count, though there is no foretelling what change the arrival of the motor-car may effect in the next two decades.

Railways in a few years have profoundly modified the travelling habits of all classes. Shanghai has at present two main lines, one to Nanking, which there connects with the Pukow–Tientsin line, and so effects contact with Peking, Siberia,

and Europe; and the other to Hangchow, the capital of Chekiang. See chapter on Railways.

Water Communications.—Of all the provinces none excels South Kiangsu in the multiplicity and complexity of its creeks, canals, and rivers. Sampans, small junks, and steam-launches ply at regular and irregular intervals to every city and town of South Kiangsu. The steam-launch is playing a great part in China's commercial development: the Chinese now build and engine them without European help, and use them both as passenger vessels and as tow-boats for flats and junks.

Steamer traffic.—There are three British lines, two Japanese, one German, and one Chinese, which work the Yangtse ports as far as Hankow (585 miles), taking all the river ports *en route*; beyond this, four lines take one in lighter draft vessels to Ichang (another 500 miles); and finally one foreign line and one Chinese negotiate the Yangtse gorges and their formidable rapids as far as Chungking (some 1,400 miles above Shanghai). There are subsidiary lines from the river through the Poyang and Tungting lakes, and to every town of importance on the tributary streams. The ports on the littoral to north and south (to Tientsin and Newchwang on the one hand, and Hongkong on the other) are worked by liners as follows: British (3), Japanese (2), German and Chinese—besides large numbers of 'tramps'. See list of Shipping in Appendix.

Shanghai is kept in direct communication with all the trading centres of the world. London, Liverpool, Antwerp, Hamburg, Marseilles, Naples and Genoa, Trieste, New York, Calcutta, Bombay, Dairen, Vladivostock, the Japanese ports, San Francisco, Portland, Seattle, Vancouver, Saigon, Singapore, Manilla, and the Australian ports are all in direct and regular communication with Shanghai: this list might be doubled if we included the additional routes and sailings attainable by transhipment at Hongkong.

Tramways.—In dealing with communications the vast changes brought about in the settlements by the introduction of tramways must not be overlooked. There are in all eleven

routes by which people can get quickly and cheaply from point to point in the International Settlement, the French settlement, and the Native City, though a system of interchange has not yet been worked out to the extent that marks Tokio and other large cities in Japan. It is somewhat remarkable that passenger traffic (for natives) still survives by wheelbarrow.

Motors threaten almost as great a change of habit as they have effected in the West. At present they are confined to prosperous Europeans and wealthy Chinese; the motor omnibus has not appeared, though the 'taxi' is coming into evidence.

Fares are municipally regulated in the case of carriages, rickshas, and barrows, and all the vehicles are under police inspection and licence.

Posts, Telephones, and Telegraphs.—In addition to the Imperial Chinese Post Office, British, American, French, German, Japanese, and Russian Post Offices exist in the settlements, and undertake the delivery of local correspondence. The British Post Office is in Peking Road.

An efficient telephone service, with a central call office and overhead wires, is in operation throughout the settlements, and is the almost universal means of communication.

Five practicable cable or land telegraph lines connect Shanghai with London:

(1) Eastern Extension Telegraph Co. (British). Cable via Hongkong, Madras and Suez.

(2) Eastern Extension Telegraph Co. (British). Cable via Australia and South Africa.

(3) Great Northern Telegraph Co. (Danish). Cable to Tientsin, thence overland via Peking and Kiakta, connecting with Russian land lines through Siberia.

(4) Commercial-Pacific Cable Co. (American). Cable via Manilla, Guam, Honolulu, and San Francisco.

(5) German-Dutch Telegraph Co. (German). Cable via Borneo, Guam, Manilla, and San Francisco.

A sixth route exists by the Imperial Chinese land lines, via Laokay or Bhamo.

The Chinese Government have public and official wireless installations at Shanghai, Telefunken system with day range about 200 miles.[1]

Industries and Manufactures

Engineering works are distributed all over the settlements and Pootung. There is practically no section of this great industry neglected, for at Kiang-nan Arsenal they even forge steel for heavy guns ; and any machine from a chronometer to a hydraulic ram, a type-writer to a linotype, can be attended to and put right, new parts being made if necessary.

The **dry docks** and building yards are located on both sides of the Huang-p'u, and their dimensions should be noted :

Name of Dock.	*Length.*		*Breadth of entrance at—*		*Depth at high-water ordinary springs.*		*Date of construction.*
	On blocks.	*Over all.*	*High-water ordinary spring level.*	*On sill.*	*On sill.*	*On blocks.*	
	ft.	ft.	ft.	ft.	ft.	ft.	
Cosmopolitan .	532	560	77	70	24	24	1899
International .	528	540	77	66	23	22	1899
New . . .	450	473	74	52	22	19¼	1880
Old . . .	400	400	53	—	16	15½	1853
Tunkado . .	350	362	67	—	16	15½	1862
Kiangnan . .	325	375	79	—	19		1870

The Shanghai yards can build, engine, and equip sea-going steamers of 1,500–2,000 tons equal in all respects to the products of Clyde and Tyne. Cheap labour and the saving of expense in bringing new ships out from home appear to balance the greater cost of materials.

The Kiang-nan Arsenal now also does marine repairs, and

[1] Further information on the subject of post offices, banks, shops, customs duties, tariffs, money, newspapers, shipping, fares, &c., &c., can be readily obtained from guide-books and pamphlets. It might usefully be borne in mind that small token silver is usually at a heavy discount.

it is the leading armoury of Central China. It has good modern machinery, and can turn out guns of moderately large calibre and small arms of every description, besides naval and military stores. The powder factories are situated a few miles farther inland at Ling-hua-pao.

The **cotton-spinning** industry is now over twenty years old, and has not proved altogether the success that was at first anticipated, though it is now improving, and in some cases prospering. The mills are mostly British, but the Japanese, Germans, and Chinese have also considerable interests in the industry ; the output in yarns is mostly purchased and woven into cloth locally. The mills are mostly located below Hongkew, with one or two large ones at Pootung, and have from 40,000 to 60,000 spindles each. Some of them have closed down ; but it may safely be said that in 1914 the total number of spindles in operation numbered between 300,000 and 350,000.

Next to cotton, **silk filatures** rank as a leading industry, giving employment to over 20,000 Chinese (mostly women and girls). They are found all over the Sinza and Hongkew districts ; the factories are 25 to 30 in number (only five are foreign-owned), with a total of 8,000 basins.

Wool, bristles, and **feather-cleaning** factories are also numerous in the suburbs on both sides of the river. The wool-cleaners are nearly all cargo-packers, and have powerful hydraulic presses : hides, furs, and pelts of every description are also treated and exported in large quantities. **Paper-making** (of the rougher kind for native use), **flour-milling,** and **match factories** are being developed by native capital. Now that oil is brought in bulk in ' tankers ', the ' tinning ' industry to further the retailing of the oil is also growing rapidly. The Chinese are large consumers of **mineral oil,** and every treaty-port has now huge dépôts, always outside the harbour limits, for receiving and distributing the oil. In a similar way the **potash** trade is developing very rapidly.

Trade and Commerce

Shanghai's commercial pre-eminence is less a matter of manufacturing prosperity than of banking, shipping, insurance, and distribution. Before manufactures appeared at all, it was already one of the great world centres of trade. The annual and decennial reports and returns of the maritime customs are the best documents to study the port's commercial development. A bare summary only can be given here. In the short period between 1906 and 1912 the total **import** and **export trade** increased from a sum of Taels 421,956,496 to Taels 491,485,487. Of this enormous aggregate the import of **foreign goods** amounted to Taels 211,769,603. Taking only the articles which were valued at over one million Taels, we get cotton goods 53,000,000, opium 32,000,000, cotton yarn 30,000,000, sundries 28,000,000, sugar 9,000,000, dyes 8,000,000, kerosine 6,000,000, raw cotton 6,000,000, tobacco 6,000,000, metals 6,000,000, woollen goods 5,000,000, soap, gunny bags, machinery, paper, wines and spirits, timber, and electrical gear 1,000,000 each. That 138,000,000 Taels worth of these goods were re-exported, chiefly to the river and northern ports, emphasizes the fact that Shanghai is a great distributing centre.

Native produce to the value of Taels 198,000,000 were also imported, and almost all re-exported, namely, Taels 42,000,000 worth to Chinese ports, and Taels 125,000,000 worth to Hongkong and foreign countries, the balance being retained for local consumption.

In the year 1914, the latest pre-war figures, the total imports were Taels 241,245,867, the total re-exports 142,580,114, leaving Shanghai with net imports valued at Taels 98,665,753. In the same year the native produce amounted to only Taels 172,685,347, of which Taels 148,039,898 were re-exported, leaving Shanghai to be credited with Taels 4,645,449.

The net *exports* of produce of local origin in 1914 amounted to Taels 84,763,933, and adding imports and exports together

we get the net value of the trade of the port to amount to Taels 208,075,135.

The total trade in 1914 was Taels 498,695,147, of which Taels 290,620,012 were re-exported.

The Maritime Customs revenue for 1914 amounted to Taels 12,061,197, allocated as follows: British, Taels 6,063,141; Japanese, 2,485,208; Chinese, 1,309,217; German, 812,328; French, 315,710; Austrian, 222,121; American, 141,161. A very noticeable feature was that the revenue from imported opium had fallen to Taels 344,079.

The **shipping** returns (steamers only, as the sailing vessels are in comparison a negligible quantity) show the same predominance of British interests. Of a total of 14,640 steamers entering the port with a tonnage of 18,733,167, the British had 4,338 ships and 7,848,371 tons; the Japanese 3,581 vessels and 4,704,467 tons; Chinese, 5,251 vessels and 3,347,287 tons; Germans, 435 and 1,117,700 tons; Americans, 460 and 444,672 tons; French, 123 and 440,473 tons; Russian, 122 and 224,948 tons; and Norwegian, 129 and 154,694 tons.

With regard to the **distributing trade** of Shanghai, signs are not wanting that it is being slowly undermined to some extent. Shippers are increasingly sending big ocean-going steamers, especially with heavy machinery and oil, to the outports direct; and when these vessels are able to pick up export cargo, as they often do, they never go near Shanghai at all.

The **banking** and **insurance** business done in Shanghai is enormous, and though it is participated in by all the leading trading countries, Great Britain, India, and the colonies do more than all the rest put together. It is also a great centre for joint-stock operations, and has an active Stock Exchange under rules and regulations similar to those prevailing in British cities. Many of the companies, in cases where the majority of the shareholders are Chinese or non-British foreigners, are on the Hongkong register, and are subject to the laws and regulations of the Crown Colony.

Distances from Shanghai

		miles	Routes
To Changchow Ku	by water	126½	5 A, 1 A
,,	by rail	104	—
Changshu Ku	by water	85¼	9 A
,,	,,	74½	9 C
Chapu	,,	63	3 C
Chinkiang	,,	165	Yangtse
,,	by rail	150	—
Fengsien	by water	35¾	2 A
,,	,,	32¼	2 B
Hangchow Settlement	,,	121	3 A, 1 A
,,	by rail	113	—
Kashing	by water	63½	3 A
,,	by rail	56	—
Kiatinghsien	by water	25	7 D
Nanking	,,	210	Yangtse
,,	by rail	193	—
Kiangyin	by water	105	Yangtse
,,	,,	125¼	9 A, 13
Kunshan	,,	48	5 B
,,	by rail	32	—
Küyung	by water and land	180¼	5 A, 1 A, 17 B
Liuho Ku	by land	28½	7 E
Pinghu	by water	55¼	3 C
Pingwang	,,	67½	4 A
,,	,,	64½	4 B
Soochow	,,	70	5 A, 5 B
,,	by rail	53½	—
Sungkiangfu	by water	32	6 A
,,	,,	29¼	6 B
,,	by rail	22	—
Tanyang	by water	154	5 A, 1 A

		miles	Routes
To Taitsang	by water	54	7 A
,,	,,	$43\frac{1}{2}$	7 B
,,	,,	46	7 C
Tsingpuhsien	,,	$33\frac{3}{4}$	4 B
Wusih	,,	$100\frac{3}{4}$	5 A, 1 A
,,	by rail	80	—

SHIHMEN CHE (Chekiang)

Approximate { Latitude, 30° 35′. Longitude, 120° 24′.

Authority: Military Report on the Province of Chekiang, 1912.

Shihmen Che or Shih-mên-hsien, locally pronounced Za-mên-yüen, is a city of irregular shape, with a perimeter of about 2 miles. It is surrounded by a wall 15 to 20 ft. high, 3 ft. thick, backed on the inside by a mud-bank 12 ft. thick, reaching to within 5 ft. of the top of the wall. This bank is revetted on the inside with stone and brick so that it cannot easily be climbed except by the steps which ascend it at each gate. The wall is of stone with the exception of the upper 6 ft., which is of brick.

There are five gates, known respectively as the North, East, Great South, Small South, and West Gates. Of these the North and the Great South Gates are protected by a semicircular bastion of similar construction to the wall, and of about 30 yds. radius. The entrance to the bastion is by another gate, which at the North Gate is in the east side of the enclosure, and at the South Gate in the west side.

There are three water-gates by which boats can enter the city, near the North, West, and Great South Gates.

At an average distance of 10 yds. from the wall is a canal forming a moat. The average width is 15 yds. on the north, west, and south sides, but on the east side the Grand Canal, here 40 yds. wide, forms the moat. Except on the north

side, where the water is only 1 to 2 ft. deep, the moat is navigable for boats. It is bridged at each gate.

The wall is broken down 30 yds. south of the East Gate, and could be climbed there in two places close together; it has also given way at a point 300 yds. south of the East Gate. The most vulnerable part of the city, however, is the north side, where the moat is never more than 1 or 2 ft. deep, and in winter is quite dry for a distance of 20 yds. from the point where it joins the Grand Canal at the North Gate. Moreover, the northern suburb gives cover nearly up to the North Gate.

The population of Shihmen Che is estimated at 7,000. Inside the city the western half is fairly well filled with houses, but the eastern half consists chiefly of open spaces lying round a large examination hall. There is a suburb of 120 houses outside the North Gate, and smaller suburbs outside the West and Small South Gates.

Surroundings.—The surrounding country is quite flat, much cut up by creeks, and well planted with mulberry-trees and rice.

Supplies.—Supplies of pork, fish, ducks, chickens, vegetables, rice, and flour are obtainable, but as the trade of the place is small they are not found in large quantities.

Transport.—Boats are exclusively used for transport. Perhaps 100 craft of all sizes would be obtainable here. Wheelbarrows are not used.

Government.—The city is of the fourth or Hsien class, and is subordinate to Kashing. There is no garrison beyond a few soldiers for police purposes. There are no foreign residents.

Communications.—Nearly all travelling is done by water. Launches navigating the Grand Canal stop at Shihmen Che; and a creek running from the city to Haining is said to be navigable by launches, but it is not regularly used owing to lack of trade. A canal also goes south to Changan and thence to Hangchow, but boats have to cross a haulover at Changan. Although the waterways are most used, a road

passable for horses runs along the Grand Canal to Kashing, and another leads southwards through Changan to Hangchow.

There are post and telegraph offices at Shihmen Che.

Distances from Shihmen Che

	miles		
To Hangchow (Settlement)	30¼	Route	1 A
Hangchow (City)	35¾	,,	1 A
Changan	5¼	,,	1 E
Kashing	27½	,,	1 A
Shanghai	90¾	,,	1 A and 3 A

SHUYANG

Approximate { Latitude, 34° 15′. Longitude, 118° 57′.

Authority: A. H. Hilton-Johnson, 1908.

The City and Suburbs.—Shuyang is a walled city situated on the east bank of a small river called the Shu Ho or Shang Ho, about 43 miles by road NNW. of Tsingkiangpu. Its population is approximately 10,000. The trace of the walls is roughly oblong, the city about 1½ miles long from east to west, and less than ½ mile wide from north to south. The wall consists of the usual brick-facing a few feet thick and 20 to 25 ft. high, backed on the inside by an earth-bank and forming a crenellated and loopholed parapet some 6 ft. higher than the top of it.

There are four gates, placed one each at the east and west ends and two in the south wall. The entrances are 12 to 15 ft. square and have heavy, iron-bound, wooden doors.

There is an extensive suburb nearly a mile long outside the East Gate and smaller ones outside the South and West Gates. The interior of the city is thickly built over. The houses in it and the suburbs are mostly of brick with tiled

or thatched roofs. The streets are narrow, and paved with flag-stones.

Surrounding Country.—The surrounding country is flat or slightly undulating, with little vegetation, and generally passable—except for the river on the south—by all arms. There is no high ground within artillery range.

Supplies.—Supplies of food, fuel, and forage are obtainable in fair quantities. Water is obtained from the river and from wells, but is hard and of poor quality.

Transport.—Land transport consists chiefly of wheel-barrows, and about 300 would be obtainable. There is no cart agency and no regular supply is forthcoming. There is a fair general business in the city, more particularly in the eastern suburb, but nothing special either in the way of trade or industry. Water transport consists of a few boats lying in the river to the SW. of the city.

Government.—Shuyang is a district city dependent on Haichow, which itself is under the Tao-t'ai of Süchowfu. The chief local official is the Chih-hsien or chief magistrate, whose *yamên* is situated near the West Gate. There are about 30 police.

Communications.—There are good cart-roads radiating in all directions. By water there is communication in summer with Haichow, and for a short distance to the south and east. In winter the river is deep enough for small boats only, for a few miles either way. There is a post and telegraph office in the city.

Distances from Shuyang

		miles	
To Haichow	by land	48½	Route 28 C
Tsingkiangpu	,,	42½	,, 28 C

SINPUCHEN. (See Plan)

Approximate { Latitude, 34° 37′. Longitude, 119° 20′. Height, sea-level.

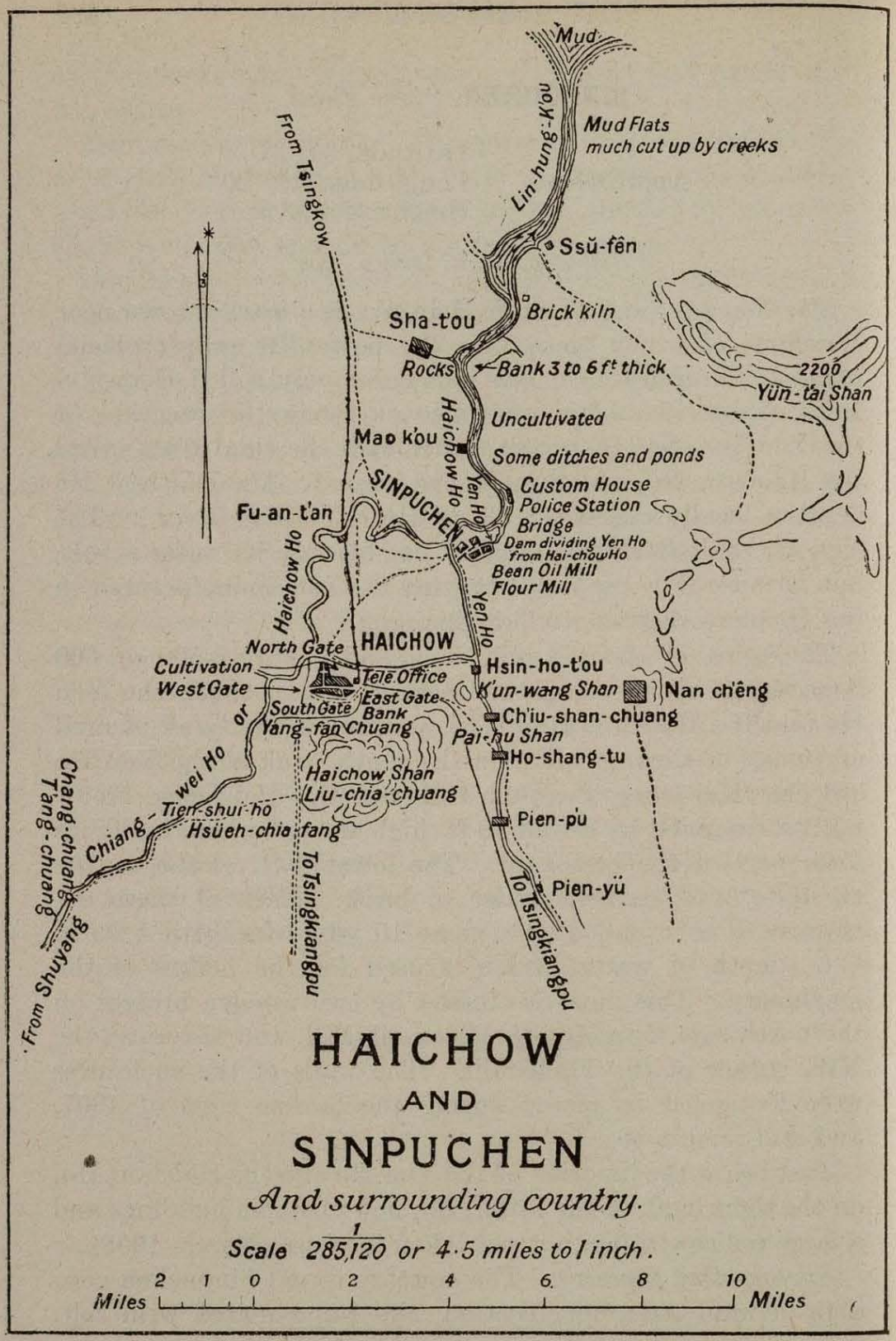
Authority: H. R. Davies, 1908.

The Town.—Sinpuchen, or Hsin-p'u, is a market town near Haichow, of which place it is the port. Its proper official name is Lin-hung-chên, but it is commonly called Hsin-p'u. It is of considerable importance as being the junction of the Yen Ho (No. 1) or Salt Canal with the tidal river called the Haichow Ho, which junks can ascend. The Haichow Ho is often locally called the Ch'ao Ho or 'Tidal River'. The Yen Ho (Salt River) is so-called not because its water is salt, but because it is used for carrying the salt, manufactured in the Haichow district, to Tsingkiangpu.

The town is about ¾ mile long and contains 500 or 600 houses, stretching along the neck of land between the Yen Ho and the Haichow Ho. The houses are nearly all of mud and most of them small. On the south bank of the Yen Ho are the Kai-foong Bean-oil Mill and the Hai-foong Flour-mill, surrounded by a wall 10 ft. high, except where buildings form part of the perimeter. The lower 6 ft. of the wall is of stone, and the remainder of brick. Each of these enclosures is surrounded by a moat 10 yds. wide with 4 ft. to 6 ft. depth of water, which is used for the boilers of the machinery. This moat is crossed by two wooden bridges on the north side, opposite the Bean-oil Mill, and also near the NW. corner of the Flour-mill. The walls of the enclosures were loopholed in places during the famine riots of 1907, and still remain so.

Just below the junction of the Yen Ho and the Haichow Ho, on the right bank of the latter, are new customs buildings and a large police station, not yet taken into use (March, 1908).

Surrounding Country.—The country round Sinpuchen consists of mud flats, uncultivated, and impregnated with salt.



HAICHOW
AND
SINPUCHEN

And surrounding country.

Scale $\frac{1}{285,120}$ or 4·5 miles to 1 inch.

2 1 0 2 4 6 8 10
Miles Miles

The nearest hills are Haichow Shan to the south, and Yün-t'ai Shan to the NE., at distances of 4 and 8 miles respectively.

The Yen Ho here is about 30 yds. wide, and is crossed by two wooden bridges. It is separated from a small branch of the Haichow Ho by an earth embankment 15 ft. wide. Moreover, it breaks up into a network of canals. Its depth at the time of the year when lowest is about 3 ft., rising in summer to 4 or 5 ft. This part of its course is liable to be blocked with ice for from one to three months in winter.

The Haichow Ho is a tidal river 150 to 200 yds. wide. It runs through a flat, muddy, uncultivated country to the sea, 11 miles distant. Its mouth and the lower part of its course near the mouth are often called Lin-hung-k'ou. It has two shallow bars, one near Mao-k'ou, 2½ miles below Sinpuchen, the other at its mouth. Of the latter the China Sea Pilot, 1912, says, ' A shoal or bar extends about 5 miles north-eastward from the entrance, and it can be crossed by junks of 8 ft. draught at high water. The rate of the tidal stream is considerable. The port is frequented at all seasons by large numbers of native craft ; the trade, which appears to be of some importance, is chiefly in fish, grain, and other foodstuffs.' The channel is liable to variations in depth from silting and from heavy rains.

The steamer *Kwang-chi* (China Merchants S.S.) has ascended to Sinpuchen and anchored near the customs buildings, where the water is said to be particularly deep ; and it is reported that a German steamer ascended via Sinpuchen, as far as ' Hsiang Shui Kou ', at the beginning of 1914.

Mr. T. J. Eldridge, the coast inspector in the service of the Chinese Government, writes as follows on the port of Sinpuchen : ' For various reasons, conditions at this port are more unfavourable for navigation than at any other in my knowledge. In the first place, the shallowest part of the river is about two miles below Hsin-p'u and ten above the outer bar. At the shallow referred to, 3½ ft. of mud are exposed at low water ; consequently vessels will often have to wait till high water before they can start. The time of high water on the

outer bar being 20 minutes earlier than at Hsin-p'u, by the time a vessel has reached the former the tide will have fallen 3 or 4 ft. Under these conditions it will not be safe for vessels of more than 8 ft. draught and 250 ft. length to navigate this river at neap tides in the low-water season. At spring tides, vessels of 10 or 12 ft. draught might enter and leave.'

Supplies.—Sinpuchen has a daily market, and supplies of the ordinary sort can be obtained. The principal point of importance, so far as supplies are concerned, is that the flour-mill can grind 100,000 lb. of flour in a day, and that a stock of wheat sufficient for the requirements of the mill for three or four months is kept on hand. The beans used in the mill for the manufacture of oil do not appear to be an article of food to any extent The refuse is made into bean-cake and used as a manure.

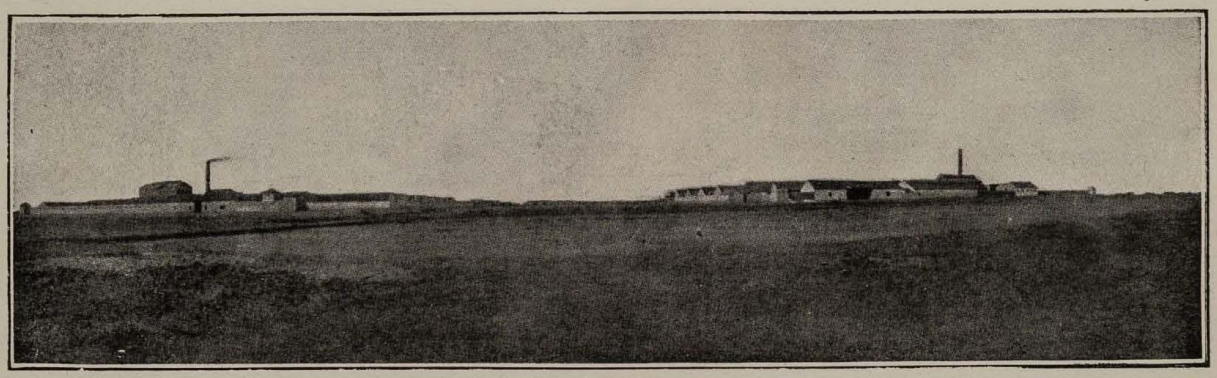
Salt is also largely manufactured in this district from salt wells, the ground all round being full of it. There is no fresh water at Sinpuchen. All drinking-water is brought from Panpu, 12 miles distant, or from the Yün-t'ai Shan. There is drinkable water in the wells at Haichow, but apparently not in sufficient quantity to supply Sinpuchen as well.

Transport.—On the Haichow Ho about 120 sea-going junks were counted in March, 1908, of which more than half were large vessels carrying from 50 to 100 tons of cargo. On the Yen Ho about 70 boats were counted, some carrying passengers, and others salt from 6 to 30 tons in weight. For land transport wheelbarrows are almost exclusively used, and probably at least 200 could be obtained at Sinpuchen. There are no roads passable for carts in the neighbourhood.

Government.—Sinpuchen is under Haichow. It has a small garrison for the suppression of salt smuggling.

Communications.—Those with the sea have been dealt with under the Haichow Ho. The Yen-Ho leads to Tsing-kiangpu and is navigable throughout the year. Wheel-barrow roads lead in all directions.

There is a post office at Sinpuchen.



FLOUR AND BEAN-OIL MILLS (SINPUCHEN) FROM THE SOUTH

Distances from Sinpuchen

		miles		
To Haichow	by land	3½	Route	28 B
Haichow	by land and water	6	,,	28 D
Tsingkiangpu	by land	79½	,,	28 B
Tsingkiangpu	by water	95½	,,	28 A
Antungwei	by land	48	,,	30 A
Jihchaohsien	by land	67	,,	30 A
Kiaochow	,,	143	,,	30 A
Kiaochow via Chüchow Sung	,, about	181	,,	30 B
Süchowfu via Ichowfu	,,	179	,,	31 A
Kanyü	,,	23¾	,,	31 A
Ichowfu	,,	75¾	,,	31 A

SOOCHOW. (See Plan in separate case)

Approximate { Latitude, 31° 19′. Longitude, 120° 43′. Height, sea-level.

Authorities : China, Maritime Customs, Decennial Reports; Imp. Japanese Rys., Official Guide, vol. iv, 1915; Directory and Chronicle for China, &c., 1916; ' Beautiful Soo ', H. C. Du Bose, 1899.

Soochow, locally pronounced Su-tseu, is the capital of Kiangsu. It has recently been officially named Wu-hsien. It is celebrated for the beauty of its site and its waterways, and is known as the ' Venice of the East '. It is, moreover, a city of ancient fame, having been the capital of the Kingdom of Wu in the sixth century B. C.

The City.—A walled city of the usual type, it is roughly rectangular in form and surrounded by a moat 20 to 80 yds. wide and 6 to 15 ft. deep, a section of which on the west and south sides forms a part of the Grand Canal. A smaller waterway which follows the line of the walls almost the whole way round inside makes an inner moat. The walls are 25 to 30 ft. high, about 10 miles in perimeter, and in very good repair. There are six gates, three of which open on to the Grand Canal.

All of them are approached by bridges spanning the canal, and there are five sluice-gates.

There are extensive suburbs on the west, north, and east. The busiest parts of the city are round the Yüan-miao-kuan in the centre and inside and outside the Ch'ang-mên, an important gate in the northern part of the west wall. The railway station is a mile from this gate, and a short distance outside the NW. corner of the city. The Japanese and European concessions lie along the south of the city beyond the moat, and they are connected with the railway station by a good carriage-road which forms a popular promenade through the west and south suburbs. A branch carriage-road runs west, opposite the Ch'ang-mên to the Liu-yüan gardens. Passengers by boat from the south arrive at the pier outside the P'an-mên (locally, Poo-mên) Gate at the SW. corner of the city.

There are four pagodas in the city, of which the largest is about 250 ft. high, and stands in the centre of the northern quarter. It is accessible, but owing to overhanging eaves it is unsuitable for helio-signalling. The European settlement would form a good camping-ground, as very little of it has been taken up.

The climate is mild with a large rainfall in the spring. The larger streets are tolerably well drained, but the smaller ones are narrow and insanitary. There is no modern water-supply, and the inhabitants within the city depend on wells while those outside use the canal water. The population is estimated at 280,000. Within the walls there are 6 canals running from north to south and 6 from east to west, intersecting each other at intervals of $\frac{1}{4}$ to $\frac{1}{2}$ mile. The canals are 10 to 15 ft. wide, and the banks are faced with stone.

The industries include silk filatures and cotton-spinning, but the chief of them is the silk-weaving, for which the city is celebrated. The best rice in China is grown in the neighbourhood, and vegetables, beans, and wheat are cultivated. Stock-rearing and sericulture are largely practised, and the fishing industry thrives in the neighbouring waters. There is an electric light company under Chinese management.

Soochow is an important educational centre with many schools. It has also numerous establishments for special branches of learning, including a college, medical school, agricultural school, polytechnic, normal school, a military school, police school, railway school, and a school of law and politics. In addition to these there are several missionary educational establishments.

There are five hospitals in Soochow and its suburbs and a Government dispensary, including two American Mission Hospitals—one for men and the other for women.

The number of steam-launches entered and cleared at Soochow in 1915 was 9,510, with a tonnage of 303,024.

Surrounding Country.—The surrounding country is a flat plain intersected by numerous waterways, and broken some 3 miles south-west of the city by hills rising to 1,000 ft. At a distance of a few miles to the south and west is the T'ai Hu or Great Lake, which formerly extended to the city itself and is now reached by numerous creeks. There are numerous small lakes east of Soochow and within a radius of 5 miles.

Supplies.—Large supplies of all kinds can be obtained at Soochow. Fish is abundant, and quantities of fruit, vegetables, pork, mutton, and fowls will be found in the shops.

Transport.—Large numbers of boats and junks are always available at Soochow, and steam-launches ply continually in the canals. Outside each of the gates, especially the Ch'ang-mên and the P'an-mên, boats are always waiting. There are thousands of large boats capable of carrying supplies and heavy material; and in the canals are moored numbers of quick pleasure-boats for carrying passengers and picnic parties to places in the neighbourhood.

Government.—The office of the civil magistrate for Soochow and Changchow is in the south-western quarter of the city; and near it is the office of the Water Police. There is an organized police force in the city. The Custom-house is situated at the NE. corner of the European concession.

There is a considerable military force at Soochow, quartered in barracks (1) on the west bank of the Grand Canal about

a mile south of the Custom-house, (2) about 1 mile west of the Ch'ang-mên, (3) ½ mile north-east of the last-named, and (4) on the west bank of the Grand Canal about 1½ miles west of the last-named. (This is from a report made in 1908.)

Foreign Residents.—The European concession is still in an undeveloped state; but there were in 1913 about 118 Europeans resident in Soochow, the majority of whom were Americans and connected with the missionary institutions. The following societies have representatives at Soochow: American Presbyterian Mission, American Presbyterian Mission (Southern), American Protestant Episcopal Church Mission, American Southern Baptist Mission, Methodist Episcopal Church, South, U.S.A., Apostolic Faith Mission, American Church Mission.

The American Presbyterian Mission has a compound, with a woman's hospital, outside the Ch'ang-mên. Inside the Ch'ang-mên the American Episcopal Mission has its quarters, with a boys' school. The Southern Methodist Mission has one compound in the west central quarter, and just south of it is the Southern Presbyterian Mission, which has another compound with a hospital and girls' school outside the Ch'i-mên in the north wall. The Southern Baptist and the Roman Catholic Missions are quartered in the north-east part of the city. The other compound of the Southern Methodist Mission is inside the Fêng-mên (locally called Foo-mên). It contains a hospital for men and another for women, the Laura Heygood Memorial School for Girls, and the Soochow University. This locality is called the T'ien-tz'ŭ-chuang, and lies just south of the Ink Pagoda.

In the Japanese concession there are the Japanese Consulate, police office, post office, and several hotels. There were 101 Japanese residents at Soochow in 1914.

Communications.—The Shanghai–Nanking Railway has a station at Soochow a few hundred yards outside the NW. corner of the walls. A good carriage-road runs from the station outside the west wall to the foreign settlement.

Apart from the railway, communications with Soochow are

almost entirely by water on the network of creeks and canals which surround the city. The Grand Canal route runs northwards to Chinkiang and south to Hangchow. The Tai-shêng-ch'ang-Kung-ssŭ and the China Merchants' Steam Navigation Company have services to Hangchow, the distance being covered in 17 to 20 hours.

The same companies run a service eastwards to Shanghai; and a very busy junk service plies on the waterways round Soochow in all directions. Movements by land are hampered by creeks and by the bad condition of the towing-paths which run along the canals. There is a Chinese post office in the suburb outside the Ch'ang-mên and others at several places in the city. There is a telegraph service. The telephone office is in the SW. quarter near the civil magistrate's office, and the service extends over the city and suburbs.

Distances from Soochow

		miles		
From Soochow to Shanghai via Three Waters	by water	70	Route	5 A
From Soochow to Shanghai via Kunshan	,,	69	,,	5 B
Chinkiang	,,	104½	,,	1 A
Wusih	,,	30¾	,,	1 A
Changshu Ku	,,	22½	,,	11
Kashing	,,	39	,,	1 A
Shanghai	rail	53½	,,	—
Chinkiang	,,	96·87	,,	—
Nanking	,,	139·85	,,	—
Kunshan	water	20½	,,	5 B

SÜCHOWFU. (See Plan)

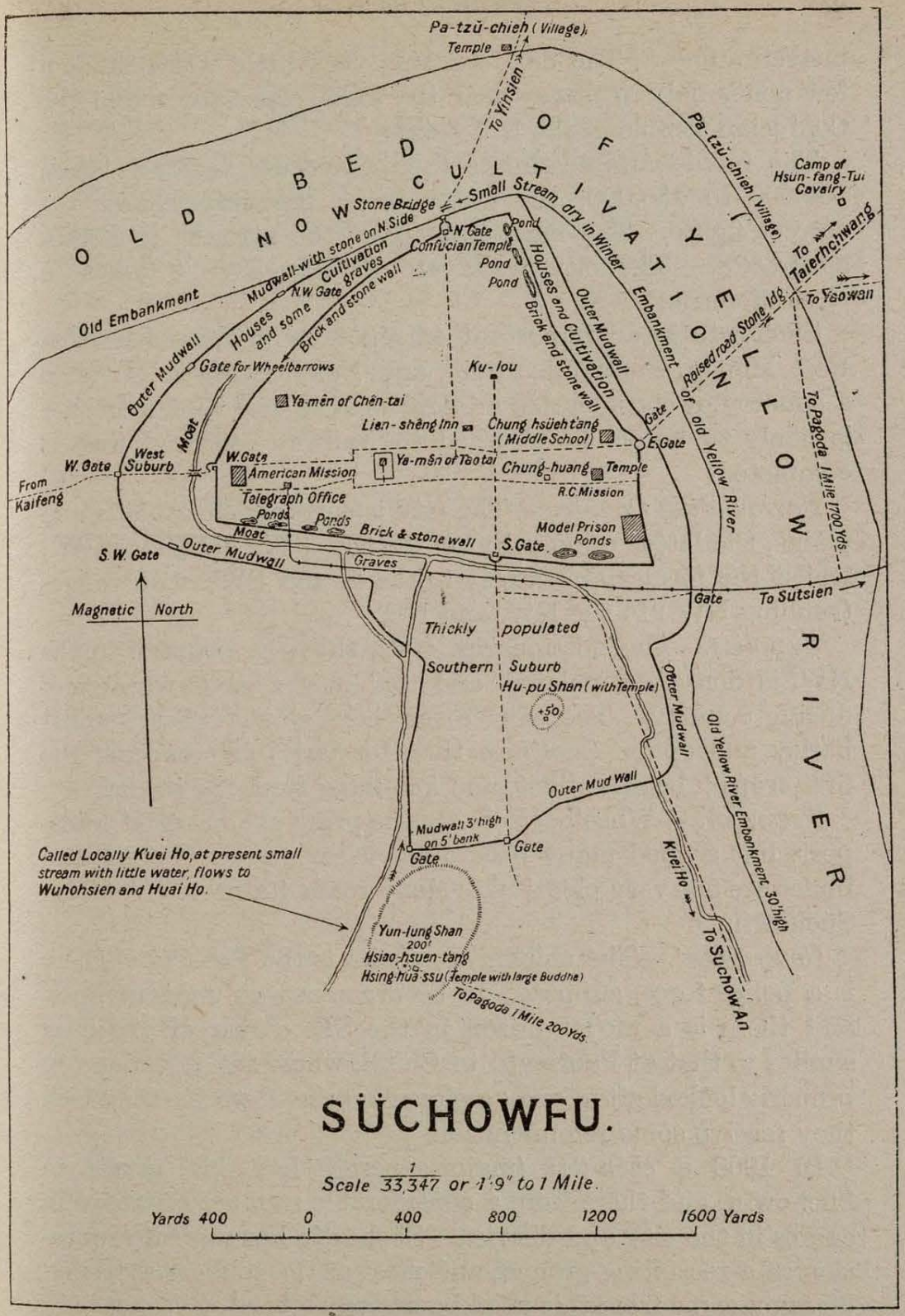
Approximate { Latitude, 34° 12′. Longitude, 117° 20′. Height, sea-level.

Authority : mainly G. E. Pereira, 1908.

The City.—Süchowfu, recently officially named T'ung-shan-hsien and called on the railway Hsuchowfu, lies below the level of the old Yellow River bed, which before 1852 flowed past the city. The river came at that time from a direction slightly south of west, and passing the north wall, made a sharp bend to the south, and skirted the outer mud wall of the city. The city is surrounded by the usual wall, 25 to 30 ft. high, in good repair. The northern part is principally of stone, but in the other parts there is a larger proportion of brick. The walls on the inside are faced with stone, and there is a good walk along them about 12 ft. wide, with battlements 10 to 12 ft. higher. At the SE. corner the part of the wall at the back of the model prison is railed off.

The four city gates have double entrances, the outer ones of the South and West Gates facing south, those of the East and North Gates facing north and east respectively. In addition to the main city wall there is an outer mud wall which the Chinese state was built as a protection against robbers. It is, however, apparently useless for such a purpose, and is more likely to have been intended as an extra barrier against the old Yellow River. The greater part of this wall on the north and east side is faced with stone, and about 30 ft. high, but on the south side it consists of only 3 or 4 ft. of masonry on the top of an embankment. Between the city and the mud walls the distance for the most part varies between 50 and 150 yds. At the South Gate, however, the interval widens out to 1,200 yds. and at the West Gate to 400 yds., enclosing in each case a thickly populated suburb. Elsewhere it contains a few houses, gardens and graves.

The houses are mostly of mud, and the streets paved with



SÜCHOWFU.

Scale 1/33,347 or 1·9" to 1 Mile.

Yards 400 0 400 800 1200 1600 Yards

uneven stones. The city contains very little waste land, a few ponds only in places near the walls, especially round the Confucian temple in the NE. corner.

The missionaries estimate the population variously from 100,000 to 150,000, the latter being probably nearer the correct figure. The magistrate gave the number of houses as 14,828. The city walls are slightly over 3 miles in circumference.

Süchowfu is an important entrepôt for merchandise from East Honan, South Shantung, and North Anhwei. It is in a country of considerable mineral wealth, and its importance is likely to be enhanced when the railway east and west is completed.

Surrounding Country.—The city is surrounded by hills and plains, the latter principally on the SE., SW., NNE., and W., whilst the former are mostly to the S. and SW., with ranges (running NW.) to the NW. and NE.

Supplies.—The missionaries state that the country to the NW. is densely populated, and that it is a great wheat-producing country. The chief cereal here also is wheat, whilst barley and opium (less now than formerly) are amongst the first crops ; beans, millet, and kao-liang form the second.

Transport.—Wheelbarrows are the principal means of transport, but a good many pack-donkeys are used. Ponies and mules are not very plentiful. Many roads (ta-lu) radiate from Süchowfu.

Government.—The chief civil official is the Tao-t'ai. There is a police force, supposed to be organized on modern lines, and there is a model prison in the SE. corner of the city, similar to that at Paotingfu in Chihli, where the prisoners are properly looked after, and employed on useful works, for which they receive some remuneration.

In 1908 a *chên-t'ai* (major-general) had his *yamên* in Süchowfu, and there were a considerable number of troops in camps in the city and district. Süchowfu has a great reputation as a recruiting-ground, and most of the soldiers at Tsingkiangpu came from this neighbourhood.

European Residents.—Inside the West Gate is a branch of the American Presbyterian Mission (Southern) numbering about twelve members, men and women; and the French Jesuits have a mission inside the East Gate.

Communications.—The K'uei Ho, a small stream rising in a lake to the south of the city and to the SW. of the Yün-lung Shan, flows north into the south suburb, where it joins the small moat which starts from the NW. corner of the city. It passes the South Gate near the wall, and then turning SE. flows out past the mud wall and on to the South. Small boats can go when the water is high from here to Wuhohsien in Anhwei. This stream appears to be the commencement of the Ch'ung Ho, which flows past Süchowfu.

There is a canal from the Wei-shan (or Yi-shan) Lake eastwards, passing south of the village of Mao-ts'un, and running into the Grand Canal. It is navigable from Ta-wu-chi when the water is high, or from Chu-chia-wan when low, but not between either of these places and the lake.

The telegraph office is in the SW. corner, and the line crosses the south wall ½ mile west of the South Gate, and then runs east through the south suburb; and after crossing the old bed of the Yellow River runs NE. and NNE. to Hanchwang on the Grand Canal.

The Tientsin–Pukow Railway passes on the east of the city, and now that the line via Kaifeng to Chengchow on the Peking-Hankow line has been completed, Süchowfu has become an important junction. The line east to Tsingkiangpu is under construction.

Süchowfu is on the great road from Peking to Nanking. This road forms a trade route for carts south, past Nan-hsü Chou, as far as the north part of Linhwaikwan (port of Fengyang) on the Huai River.

Another route is that SE. to Tsingkiangpu. Carts can also go northways, via Hanchwang, Yihsien, Ichowfu to Weihsien in Shantung; but they cannot be hired at intermediate places, unless one should be met with by chance returning empty to Süchowfu or Weihsien.

Distances from Süchowfu

		miles		
To Haichow and Sinpuchen via Ichowfu	by land	179	Route	31 A
Ichowfu	,,	103¾	,,	31 A
Kanyü	,,	155¾	,,	31 A
Yihsien	,,	48¾	,,	31 A
Tsingkiangpu	,,	124½	,,	33 A
,,	by land and water	140	,,	33 C
Linhwaikwan	by land about	116	,,	34

SUNGKIANGFU

Approximate { Latitude, 31° 1′. Longitude, 121° 17′. Height, sea-level.

Authority: mainly Military Report on the Province of Kiangsu (South), 1909.

Sungkiangfu, locally called Sung-kang, and on the railway Sung-kiang, lies about 20 miles south-west of Shanghai. It has recently been officially named Sung-kiang-hsien.

The City.—The city is of irregular shape, about 3 miles in perimeter. It is surrounded by a wall built of brick, though in places the lower part is of stone. The wall is on the average about 25 ft. high, and is backed up on the inside by a bank 5 ft. lower than the wall and 15 ft. thick. Near the West Gate this bank is revetted with brick on its inner side, but for the most part it is not revetted and is easily accessible from the inside. The city is entered by four gates, the North, East, South, and West Gates. Each gate is defended by a wall similar to the city wall, enclosing a semicircle of 30 yds. radius in front of the gate, the entrance to this space being by a side gate. At the North Gate the entrance is on the west side, at the East Gate the entrance is on the south side, at the South Gate it is on the east side, and at the West Gate

it is on the south side. At each gate there is a water-gate by which small boats can pass under the wall and enter the city.

Outside the wall, at a distance of from 20 to 30 yds., is a moat which is 12 to 15 yds. wide on the west and south-west sides, but not more than 6 to 8 yds. wide on the north, east, and part of the south sides. This moat is deepest on the west side, but even here it is only 3 ft. deep at high tide and about 1½ ft. at low water. On the east side there is not more than 1 ft. of water at low tide. The moat is crossed by a bridge at each gate.

Inside the city most of the houses are in the western part, the eastern portion being largely taken up with plantations of bamboo. There is a large suburb of many hundred houses outside the West Gate, and smaller suburbs outside the North and East Gates, as well as along the south face of the city.

The population is estimated at 50,000. The chief products are rice, cotton, cocoons, and silk. The Shanghai–Ningpo railway touches Sungkiangfu, the station being close to the south wall.

Surroundings.—The city is surrounded by flat country, highly cultivated, full of houses and villages, and much cut up by creeks. From the North Gate round to the East Gate there are almost continuous thick plantations of bamboo outside the moat. A group of hills lies about 5 or 6 miles north-east of the city.

Supplies.—Large supplies of fish, chickens, ducks, eggs, rice, and vegetables are obtainable.

Transport.—Boats are practically the only means of transport used. Wheelbarrows do not exist. Most of the boats are to be found near the West Gate, but the waterways leading to Sungkiangfu are so shallow that large boats are very scarce.

Government.—In 1909 Sungkiangfu was a city of the Fu class, subordinate to the Tao-t'ai of Shanghai. The city was also the headquarters of the Hsien districts, Hua-t'ing Hsien and

Liu Hsien. Besides these two districts, Sungkiangfu had under it: Ch'uan-sha Hsien, Fêng-hsien Hsien, Chin-shan Hsien, Shang-hai Hsien, Nan-hui Hsien, and Ch'ing-po Hsien. Sungkiangfu was the headquarters of the *T'i-tu* or provincial commander-in-chief of Kiangsu. There was a garrison. The main powder-magazine for the province is in this city. It is surrounded by a wall 200 yds. square and 12 ft. high, and is situated in the south-east part of the city, 200 yds. from the wall.

Foreign Residents.—There are branches of the American Protestant Episcopal Church Mission, and the Methodist Episcopal Church Mission, South, U.S.A.

Communications.—Apart from the railway, the best route to Shanghai is by a creek which leaves the moat between the South Gate and the south-west corner of the city, and runs southward to the Huang-p'u River $2\frac{3}{4}$ miles distant, whence launches can run to Shanghai. Another route is by Szeking and the Sikawei creek, but it is impassable for launches. A launch which runs daily from the Chinese Bund in Shanghai takes neither of these routes, but goes up the Huang-p'u to the next side-creek beyond that described in Route 6 A and turns up it for 1 or 2 miles to Hsiao-chiao (Siao-ko), where passengers go by small boat to the West Gate. There is no village at Hsiao-chiao.

There are post and telegraph offices in Sungkiangfu.

Distances from Sungkiangfu

	miles	
To Shanghai (via Huang-p'u River)	32	Route 6 A
,, (via Sikawei Creek)	$29\frac{1}{4}$	,, 6 B
Pinghu	29	Routes 3 C, 3 A, and 6 A
Kashing	$37\frac{1}{2}$	Route 3 D

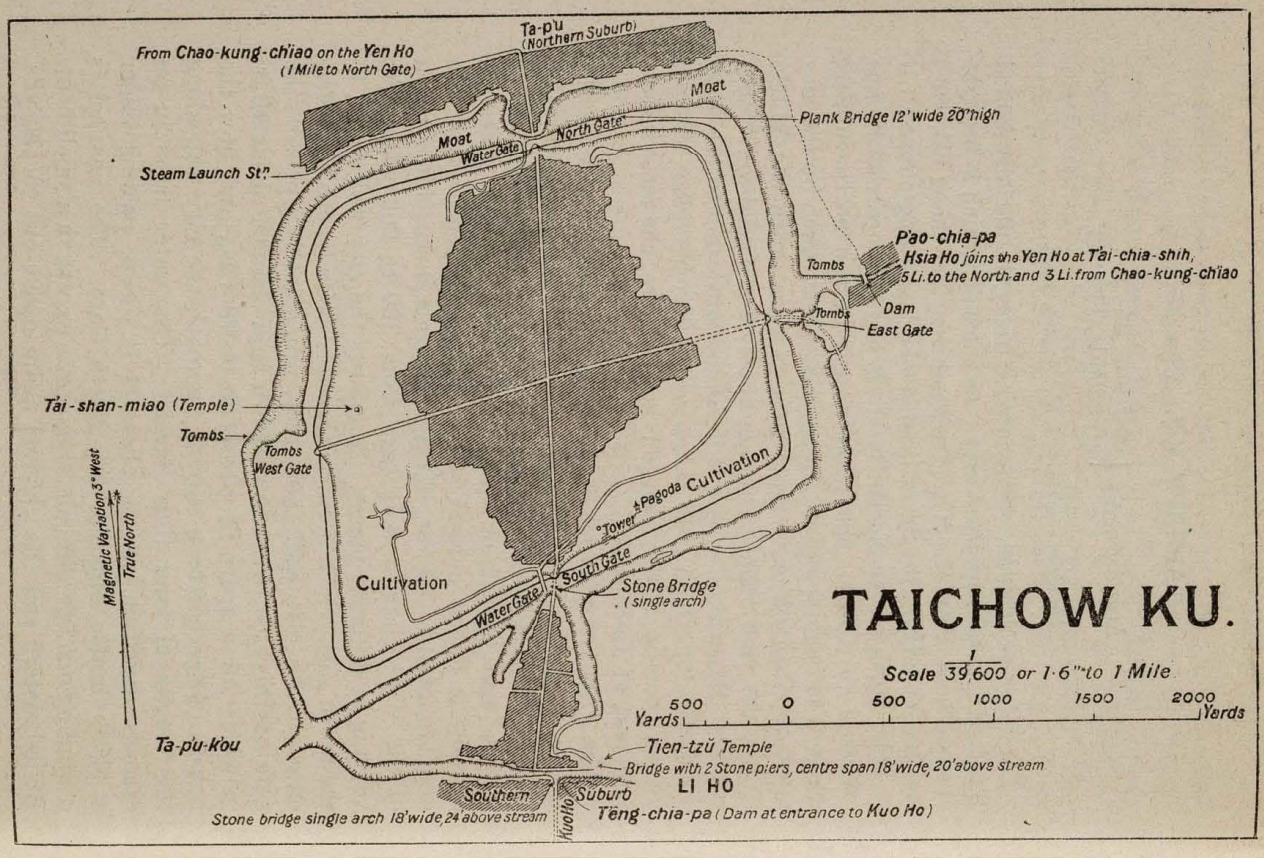
TAICHOW KU. (See Plan)

Approximate { Latitude, 32° 28′. / Longitude, 119° 52′.

Authority: mainly G. E. Pereira, 1908.

The City and Suburbs.—Taichow Ku, recently officially named T'ai-hsien, is an important city; as the salt, which is brought in small boats from the NE. (Tungtaihsien, Yencheng Ku, &c.) by the Yen Ho (No. 2), is landed at Chao-kung-ch'iao, 3 li (1 mile) north of the North Gate. It has to be carried thence overland to Ta-p'u, the western half of the north suburb, where it is re-shipped into larger boats, and taken by the city moat to Ta-p'u-k'ou. From here it goes down the Li Ho to Liu-cha, and thence through the Grand Canal via Yangchow to Shiherhwei, where it is again transferred to the large salt-junks, in which it is taken up to the Yangtse. Ta-p'u (or, as it is also called, Yen-p'u) is, therefore, the most important part of Taichow Ku.

The city is surrounded by a moat connecting with the Li Ho at Ta-p'u-k'ou about 400 or 500 yds. from the SW. corner, where it is about 40 yds. wide. Following the course of the west wall, from which it is about 100 or 150 yds. distant, it makes a bend outwards opposite the West Gate and broadens to 70 yds. It again bends inwards just north of the West Gate, and is here from 100 to 200 yds. wide, varying in different places. It follows the city wall round to the north side, which it skirts throughout its length. A reference to the plan will show how, immediately opposite the gate on this side, it narrows down to a channel about 12 ft. in width for a space of about 60 or 70 yds., and how the houses of the northern suburb approach the city wall along the tongue of land thus formed. The water flows in an easterly direction and is about 2 ft. deep, passing under a plank bridge opposite the North Gate. The channel is a winding one and difficult to navigate except in a small boat. At its eastern end the channel again opens out to 150 yds.


Ta-p'u
(Northern Suburb)
From Chao-kung-chiao on the Yen Ho
(1 Mile to North Gate)
Moat
Plank Bridge 12' wide 20' high
North Gate
Moat
Water Gate
Steam Launch St?
P'ao-chia-pa
Hsia Ho joins the Yen Ho at T'ai-chia-shih,
5 Li. to the North and 3 Li. from Chao-kung-chiao
Tombs
Tombs
Dam
East Gate
T'ai-shan-miao (Temple)
Tombs
Tombs
West Gate
Magnetic Variation 3° West
True North
Pagoda
Tower
Cultivation
South Gate
Cultivation
Stone Bridge
(single arch)
Water Gate
TAICHOW KU.
Scale 1/39,600 or 1·6" to 1 Mile
500 0 500 1000 1500 2000
Yards Yards
Ta-p'u-k'ou
Tien-tzŭ Temple
Bridge with 2 Stone piers, centre span 18' wide, 20' above stream
LI HO
Southern
Suburb
Kuo Ho
T'ëng-chia-pa (Dam at entrance to Kuo Ho)
Stone bridge single arch 18' wide, 24 above stream

in width, and is called the T'ien-tzŭ Ho. It continues of the same width along the east wall; but a broad dam with a roadway opposite the East Gate blocks the main moat, whilst the T'ien-tzŭ Ho finds an outlet by making a semi-circular bend eastwards to Pao-chia-pa. Here it passes the dammed entrance to the Hsia Ho, and after passing under a stone bridge (with a single arch, 20 ft. span, 24 ft. high) rejoins the moat. Continuing its course round the walls the main channel of the T'ien-tzŭ Ho, just before reaching the South Gate, winds in a southerly direction, and flowing under a stone bridge of two masonry piers, with centre span 18 ft. wide, 20 ft. high, it joins the Li Ho at the T'ien-tzŭ Temple, about ½ mile south of the South Gate. The smaller channel of the moat passes under a small stone bridge just outside the South Gate, and opening out again joins the continuation of the moat on the west, just before reaching Ta-p'u-k'ou.

Taichow Ku has the usual battlemented brick wall, about 30 ft. high, in good repair, and with four gates, each having a double entrance, the outer being straight in front of the inner ones. There is a broad walk along the top of the walls; that on the north, west, and south sides being each about 2,000 yds. long, and that on the east about 1,500. There is a fairly broad belt of cultivation inside the walls; on the north side there are a certain number of houses built on it.

The north and centre of the city are thickly built over, but the chief business quarter is in the western part of the north suburb (Ta-p'u), north of the moat. There is also a south suburb, partly on the island south of the South Gate, and partly on the south bank of the Li Ho. The two parts are joined by a single-arch stone bridge over the Li Ho, with a span of about 18 ft. and a height of about 24 ft. The village of Pao-chia-pa is not considered as an eastern suburb. Including the north and south suburbs, the population of Taichow Ku is probably about 70,000. Houses are mostly of stone with tiled roofs.

The T'êng-chia-pa dam is 70 or 80 yds. to the east of the bridge over the Li Ho. It is of earth, 27 yds. long and

12 yds. wide, with barricades of planks on either side blocking the small entrance to the Kuo Ho, the creek which goes to Kowan and flows into the Yangtse. Small boats wishing to get from the dam to Taichow Ku have to go by the Shih Ho, which flows into the Kuo Ho at Shih-fang-k'ou (5 miles south of the T'êng-chia-pa). This river is followed to the west and north till the Li Ho is reached at Yen-k'ou, 4 miles west of Ta-p'u-k'ou.

There are several large temples inside Taichow Ku, the most conspicuous being the T'ai-shan-miao on a mound, 100 ft. high, about 250 yds. ENE. of the West Gate. There are also large temples near the western part of the north wall, and near the eastern part of the south wall. Other conspicuous objects are a three-storied pagoda, 583 yds. west of the SE. corner of the city, and a temple tower 240 yds. west of the same.

There are water-gates just west of both the North and South Gates from which a network of small canals traverse the city.

Steam-launches plying on the Li Ho go up to Ta-p'u and anchor for the night, entering by the Ta-p'u-k'ou entrance. Successful flour-mills have been recently established here.

Surrounding Country.—Taichow Ku lies in a flat and highly cultivated country, covered with many villages among trees. It is intersected by a regular network of rivers, canals, and creeks. Except for T'ai-shan-miao hill inside the West Gate, and a small area of undulating ground to the east of the East Gate, it is everywhere flat.

European Residents.—There are chapels built by the Jesuit and American missionaries; and the latter (American Presbyterian Mission, Southern) have three resident representatives.

Communications.—The Yen Ho (No. 2), with current flowing east, begins at Chiu-li-kou on the Li Ho (1½ miles west of Ta-p'u-k'ou), connexion with the latter river being blocked by a stone dam. At mile 2 the Ta Ho branches off N. to Hinghwa; at mile 4 it passes through Chao-kung-ch'iao, and is joined 3 li farther east by the Hsia Ho at T'ai-chia-shih (called locally T'ai-chia-sa). This village is between the south bank of the Yen Ho and the west bank of the Hsia Ho. (The Hsia

Ho is a small creek only 5 li long, starting at P'ao-chia-pa, opposite the East Gate of Taichow Ku, where it is blocked by a dam.) The Yen Ho continues in an easterly direction, passing in its 10th mile Yüsi (pronounced locally Yü-ch'i), and in its 20th Tsintung, a town of 2,000 houses, both on the south bank. On the eastern side of Tsintung, the Huang-ts'un Ho, flowing from Huang-ts'un, a town 13½ miles distant on the Li Ho, joins the Yen Ho, and permits of free navigation between the two latter rivers, unhampered by dams. The Yen Ho after another 20 miles reaches Tungtaihsien, and continues to Yencheng Ku. Small steam-launches ply on it between Chao-kung-ch'iao and Yencheng Ku, and also on the river from Chao-kung-ch'iao to Hinghwa.

At Yencheng Ku the Yen Ho from Taichow Ku to Tungtaihsien and the Ch'uan-ch'ang Ho from Tungtaihsien to Yencheng Ku are also known as the Yün-yen Ho (or Salt-transport river). Salt-boats come to Taichow Ku in large numbers.

There is a post and telegraph office in Taichow Ku

Distances from Taichow Ku

		miles	
To Haian	by water	40¾	Route 22
Siennümiao	,,	23¾	,, 22
Liu-cha	,,	31¼	,, 22
Yangchow	,,	40¾	,, 22
Tungchow	,,	98¼	,, 22
Kowan	by land about	10	,, 23 A
,,	by water ,,	21	,, 23 B
,,	by water, alternative route ,,	31¾	,, 23 C
Yencheng Ku	by the Ta Ho ,,	76	,, 24 A
Hinghwa	,, ,,	36	,, 24 A
Yencheng Ku	by the Yen Ho ,,	94	,, 24 B
Tsintung	,,	20	,, 24 B
Tungtaihsien	,,	41½	,, 24 B
Yencheng Ku	Li Ho and Huang-ts'un Ho	106¼	,, 24 C

TAITSANG. (See Plans)

Approximate { Latitude, 31° 26′. Longitude, 121° 9′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Taitsang, locally called T'a-ts'ang-tseu, is a walled city of the usual type, and an independent sub-prefecture. It has recently been officially named T'ai-ts'ang-hsien.

The walls are about 25 ft. high, 5½ miles in perimeter, in good repair, and are surrounded by a moat 5 to 20 yds. wide and 2 to 8 ft. deep. There are extensive suburbs outside the West and North Gates.

The surrounding country is a flat plain intersected by numerous waterways.

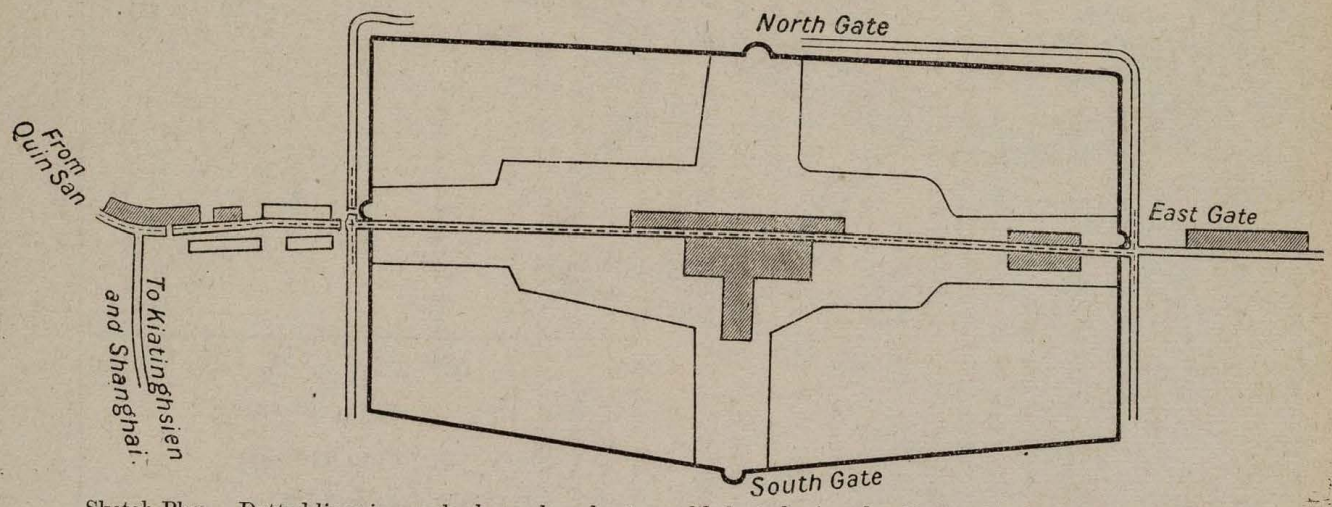
Communications.—There are regular launch routes to Shanghai and Changshu Ku, with alternative routes to Shanghai which are passable for boats of limited draft (see routes). The country by these alternative routes is fairly dry and passable; but the communications round Taitsang are mainly by water. It is connected by a creek with the Yangtse at Liu-ho-k'ou (see plan).

There is a post office in the city.

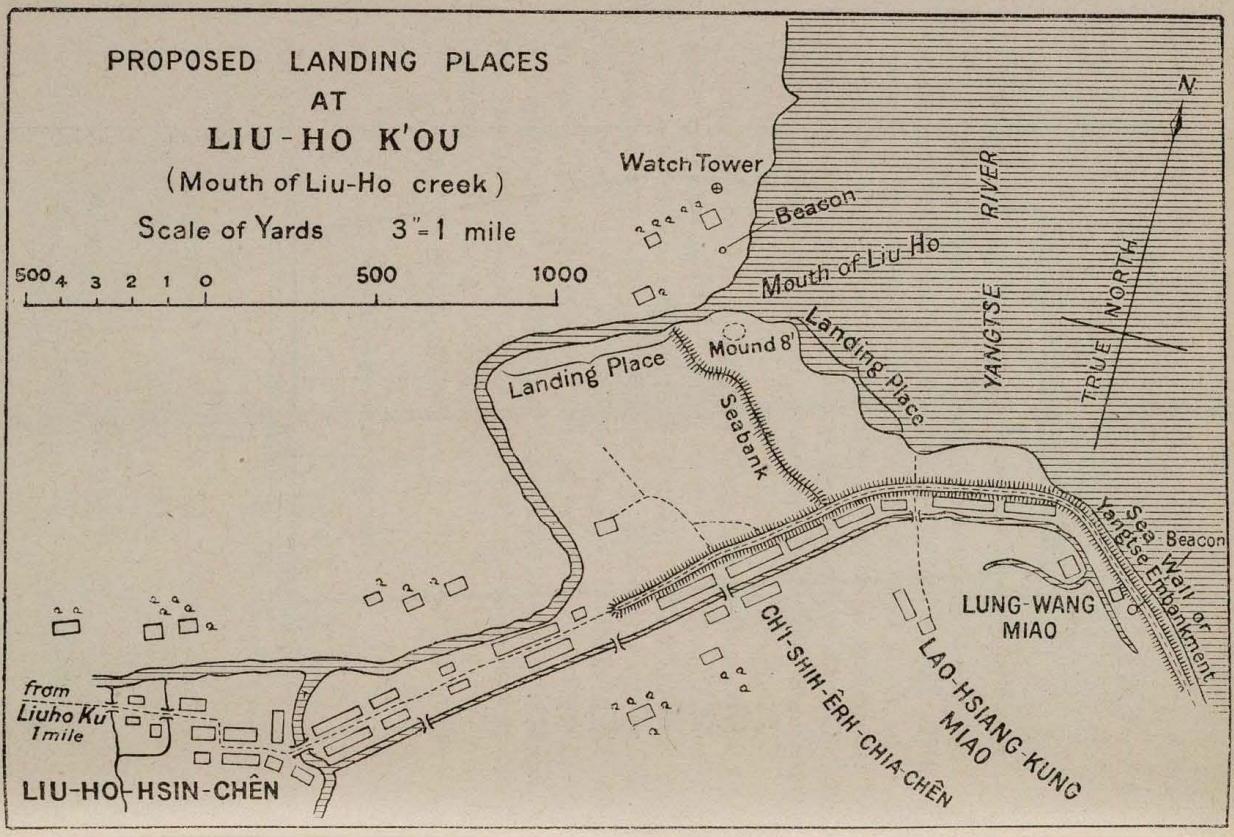
Distances from Taitsang

		miles	
To Kiatinghsien	by water	17	Route 7 D
Kunshan	,,	8	Routes 5 B and 7 A
Shanghai:			
via Three Waters	,,	54	Route 7 A
via Hwangtu	,,	43½	,, 7 B
via Four Waters	,,	46	,, 7 C
via Kiatinghsien	,,	42	,, 7 D
Liu-ho-k'ou	,,	22	,, 7 E

TAITSANG.



Sketch Plan. Dotted lines in canals show where boats are likely to be found. Shading shows business quarters.


PROPOSED LANDING PLACES
AT
LIU-HO K'OU
(Mouth of Liu-Ho creek)
Scale of Yards 3"=1 mile
500 4 3 2 1 0 500 1000
Watch Tower
Beacon
Mouth of Liu-Ho
YANGTSE RIVER
TRUE NORTH
N
Mound 8'
Landing Place
Landing Place
Seabank
Sea Wall or Yangtse Embankment
Beacon
LUNG-WANG MIAO
CH'I-SHIH-ÊRH-CHIA-CHÊN
LAO-HSIANG-KUNG MIAO
from Liuho Ku 1 mile
LIU-HO-HSIN-CHÊN

TANYANG

Approximate { Latitude, 31° 59′. Longitude, 119° 35′. Height, 50 ft.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Tanyang is a walled city of the usual type situated on the Grand Canal. The walls are about 20 ft. high, 3¼ miles in perimeter, in indifferent repair, and are surrounded by a moat 10 to 15 yds. wide and 3 to 5 ft. deep. On the south, west, and north there is ground as high as the walls within a hundred yards of the city, of which the interior is commanded. There are small suburbs on the west and south sides.

There is a branch of the American Church Mission here.

The surrounding country is undulating, with very few creeks, and generally passable for cavalry and infantry.

There is a post and telegraph office. The railway station is half a mile north-east of the city.

Communications.—Tanyang is on the Grand Canal on the regular route between Changchow Ku and Chinkiang. There is a towpath passable for animals and wheelbarrows, and the country generally is passable for all arms. The Shanghai–Nanking Railway has a station at Tanyang.

Distances from Tanyang

		miles	
To Changchow Ku	by water	27	Route 1 A
,,	by rail	27·83	
Chinkiang	by water	20½	Route 1 A
,,	by rail	18·57	

TSINGKIANGPU. (See Maps Nos. 5 and 6)

Approximate { Latitude, 33° 36′. Longitude, 119° 3′.

Authority: mainly A. H. Hilton-Johnson, 1908.

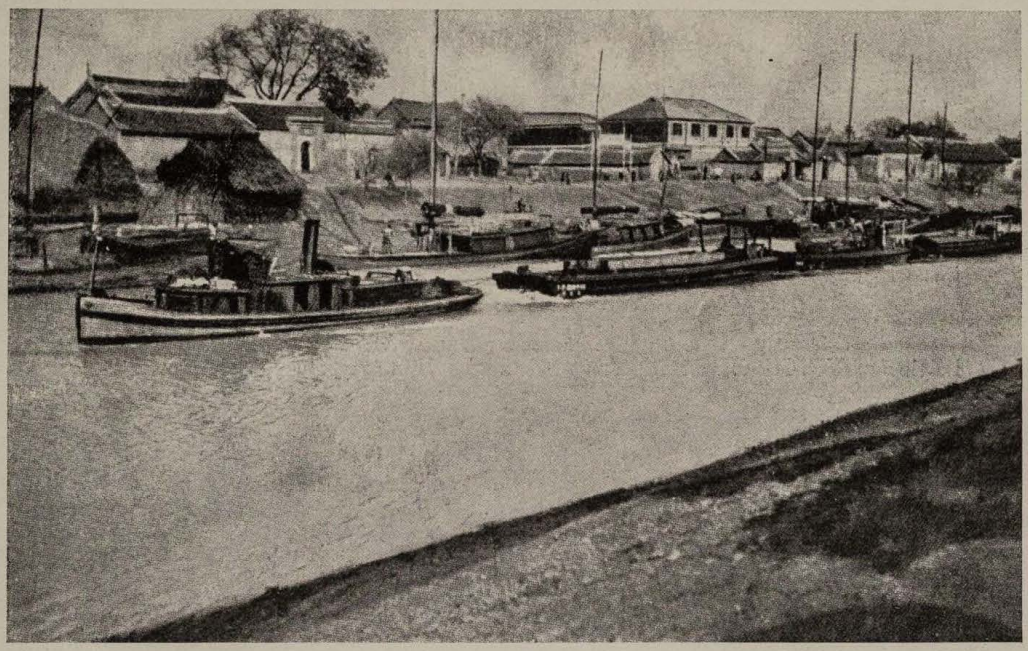
The City.—Tsingkiangpu is a large town on the north bank of the Grand Canal. Under its name is usually included the walled town of Ch'ing-ho-hsien or Tsingho, recently officially named Huai-yin-hsien, on the opposite bank. Population variously estimated at 100,000 to 150,000.

The canal at this point lies roughly east and west, and the trace of Tsingho (the old city) is an irregular oblong, with its northern side along the bank. The wall is about 20 ft. high, and consists of the usual stone and brick facing a few feet thick, backed to a height of 14 ft. on the inside by a bank of earth about 10 ft. wide on the top and 25 at the base. The upper 6 ft. of the facing forms a crenellated and loopholed parapet above the top of the bank. The perimeter of the wall is about $2\frac{1}{4}$ miles, and it is in fair repair throughout.

The interior of the city is fairly evenly built over, but there is a good deal of ground under cultivation among the houses. The streets are narrow and paved with large flag-stones. The houses are either of brick or mud and have tiled or thatched roofs. In comparison with other cities in North Kiangsu, Tsingkiangpu is considered well-to-do, but it (especially the old city) is nevertheless a poor place, swarming with beggars, and subject to frequent visitations of famine.

There are five gates, two in the north wall, and one in each of the other sides, named after the points of the compass. Those on the north are single, unprotected openings in the wall; the others have small parapets thrown out to protect the main gateways. The entrances are 12 to 15 ft. wide and of equal height, and are closed at night by iron-bound wooden doors.

There are three water-gates under the walls, closed by wood or iron gratings. They are some 8 ft. square, and are usually full of water. The Grand Canal forms a moat on the



NORTH KIANGSU: TSINGKIANGPU (LAUNCH AND CARGO-BOATS)

north side, and is bridged by pontoons opposite the two gates in the north wall. On the east, there is a moat 10 yds. wide and a few feet deep with low banks, but elsewhere the original ditch round the city is for the most part dry.

Tsingkiangpu is one of the most important commercial centres on the Grand Canal. It is practically the terminus of the canal for commercial purposes, owing to the unsatisfactory condition of the waterway northwards; and the traders in almost all cases continue the journey in this direction by road. Further, it is connected by junk and launch routes along the Huai Ho and through Lake Hung-tsê with the interior of Honan and Anhwei. The two ports for Tsingkiangpu on the Yen Ho are **Wangying** and **Sipa,** each about 3 miles distant. The former is used chiefly by passenger, the latter by salt-boats (see Route 28 A). Cart-roads connect these ports with Tsingkiangpu.

Suburbs.—There are extensive suburbs along the canal bank outside the East Gate, and smaller ones to the south and west. The business quarter lies partly in the former, but mainly in Tsingkiangpu across the canal.

Surrounding Country.—The surrounding country is flat and rather broken, and on the SE. side is a vast swamp, always under water. Elsewhere, although intersected by small creeks, it is more or less passable for all arms, especially in the north. It is very open and cultivated to a certain extent, and in summer liable to inundation and floods.

The Grand Canal is here about 50 yds. wide; and besides the pontoon bridges already mentioned outside the two north gates there is a bridge about 500 yds. farther east. The lock is a massive stone construction and gives a waterway of 24 ft. The lock-gate is usually open.

Completely surrounding the whole of Tsingkiangpu is a mud wall and outer ditch a few hundred yards from the city walls, on both sides of the canal. This was originally intended for defence, and has gateways which are closed at night. Although not in itself a serious obstacle, it would still, if properly held, make the capture of the place difficult.

Outside the mud wall on the W. side, conspicuous landmarks are the flour-mill on the south bank of the canal, near the NW. corner of the walls, and the Mint near the NE. corner on the north bank. The latter is not now working, and is reported as about to be converted into an arsenal.

The best line of approach would probably be along the canal bank on the west side of the city, as there is ample cover afforded by houses and graves to within 100 yds. of the walls, and the moat is practically non-existent.

Supplies.—Good supplies both of food and forage would generally be obtainable. Fuel as used by the people consists of dry reeds, but certain quantities of coal and firewood are procurable. Water is plentiful from both canal and wells, but is very hard and of poor quality.

Flour-mills recently established here have not been very successful.

Transport.—Water transport is fairly plentiful in the shape of native boats of suitable sizes for navigating the inland waterways. About 300 are usually to be found in the neighbourhood. There are also three companies, each having an almost daily service to Chinkiang: the Chao-shang Co. (China Merchants Co.), the Tai-shêng-ch'ang Co., and the Ta-tung Co. (owned by Japanese), and a few small launches of 2 to 4 ft. draught are generally lying at the jetties near the East Gate of the city. These launches, with a fully loaded tow of large passenger-boats (of which there are always several in the same place), are capable of about 7 miles an hour in slack water. The average capacity of the passenger-boats is 160 Chinese, or about 100 troops with light baggage for short journeys in fine weather. For longer periods or in wet weather the maximum ordinary accommodation is about 70, although on emergency, at any time where seating-room only is required, these boats could carry infantry soldiers up to the number shown on the charter board for Chinese.

The ordinary means of land transport are mule-carts, wheelbarrows, and donkeys. Wheelbarrows are the most used, and probably 500 are obtainable. Mule-carts are of

the kind known in North China as the Peking cart (*chiao-ch'ê*) ; the open dray (*ch'ang-ch'ê*) is not used. These carts have two mules, and with 550 lb. of baggage will maintain a rate of about 3½ miles an hour for 30 miles a day. The average rate of hire per day is 1·75 dols. each. Wheelbarrows loaded with 100 lb. will maintain a rate of nearly 3 miles an hour for over 20 miles a day, and cost about 35 cts. each to hire. Donkeys are chiefly used to carry loose packages, such as sacks of grain, and would not be of much value for military transport purposes.

Government.—The chief local official is the Chih-hsien, or magistrate of the district of Ch'ing-ho Hsien. The place is dependent on Hwaianfu, which is under its own Tao-t'ai residing at Hai-kuan, 4 miles south of Tsingkiangpu on the canal.

The total number of police in Tsingkiangpu and the city is about 500, divided among five stations. They are far more efficient than is usually the case. They are armed with rifles at night. The garrison is quartered in barracks outside the mud wall on the south, and in camps about 1½ miles to the north of the city.

The camps consist of square mud enclosures, separated from each other by a clear space of about 50 yds. In each enclosure are a number of buildings (of mud bricks), and a broad road running down the centre from north to south.

Tsingho was in 1908 the residence of the T'i-tu (general), commander-in-chief of North Kiangsu.

The chief public offices at this time were situated as follows, in reference to the road which leads from the Great North Gate to the South Gate : at the northern end on the east side was the Yamên of the Tao-t'ai, east of which again were the Armoury, Commissariat Office, and Granary ; south of the Yamên of the Tao-t'ai was that of the district magistrate, and south of this again, and on the west of the road, were the quarters of the T'i-tu.

Foreign Population.—The foreign population is about 30 and, with the exception of a few Japanese, is composed of

missionaries and their families. The Protestant missions represented are the American Free Methodist Mission in China, the American Presbyterian Mission (Southern), and the China Inland Mission. There are also independent workers. There are besides a hospital, a school, and an orphanage under foreign management. These institutions are near the north-east corner of the city on the north bank of the canal.

Communications.—Communications are good. By the Grand Canal Chinkiang is usually accessible for boats of $3\frac{1}{2}$ ft. draught, though the service is interrupted for two of the summer months, when the water in the canal is too high. The journey is made in about 25 hours (see Route 19 (1)). N. of Tsingkiangpu navigation on the Grand Canal is impeded by locks and shallows (see Route 19 (2)). Trade is largely carried on north of Tsingkiangpu by road.

With a few miles of overland journey, Haichow becomes accessible by the Salt Canal (Yen Ho No. 1) ; and the majority of the important places in the province south of this latitude are also in water communication. Westward the water route through the Hung-tsê Lake and up the Huai Ho connects Tsingkiangpu with the provinces of Anhwei and Honan (Route No. 35).

By land roads radiate in all directions, but mainly northwards where the country is less intersected by waterways. To the south a good road follows the east bank of the canal for 85 miles, and thence with a break of $1\frac{1}{2}$ miles by the west bank to the Yangtse.

There is a railway under construction from Tsingkiangpu to Süchowfu, of which $9\frac{1}{2}$ miles (from Tsingkiangpu to Yangchwang Ku) are already completed. The railway bridge across the canal is not yet constructed, but the connexion is made here by a ferry. This railway line is intended to extend ultimately to Haichow or the Yangtse. See chapter IX, railways VII and X.

There is a post office just inside the East Gate of the city, and a telegraph office on the north bank of the canal, near the small North Gate.

Distances from Tsingkiangpu

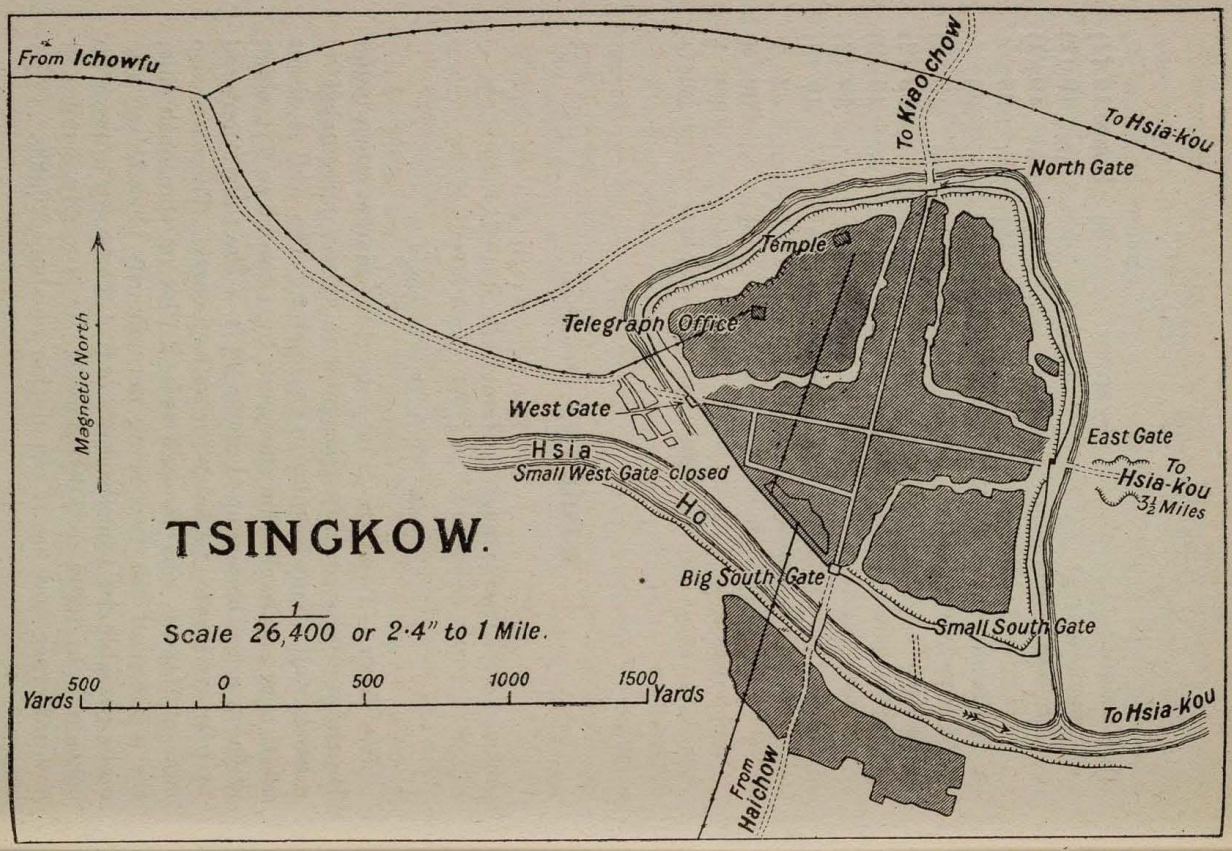
		miles		
To Hwaianfu	by water	8½	Route 19	(1)
Yangchow	,,	97	,, 19	(1)
Chinkiang	,,	111¼	,, 19	(1)
Süyi	,,	about 71½	,, 35	
Linhwaikwan	,,	,, 150	,, 35	
Matowchen Ku	,,	8	,, 19	(2)
Sutsien	,,	64½	,, 19	(2)
Taierhchwang	,,	120	,, 19	(2)
Hanchwang	,,	149	,, 19	(2)
Tsining	,,	224	,, 19	(2)
Ichowfu, via Sutsien	by land	142¼	,, 32	A
,, via Haichow	,,	155¼	,, 32	B
Süchowfu	,,	about 124½	,, 33	A
,,	land and water	140	,, 33	C

TSINGKOW. (See Plan)

Approximate { Latitude, 34° 51′. Longitude, 119° 7′. Height, sea-level.

Authority : H. R. Davies, 1908.

The Town.—Tsingkow is an important market town under Haichow. It is roughly triangular in shape, surrounded by a brick wall about 3 miles in perimeter. The wall is about 25 ft. high and backed on the inside by a bank 5 to 6 ft. thick at the top, to the height of about 20 ft. The town is entered by four main gates passable for bullock carts. There are also two small gates, one on each side of that on the south side, the western of the two being permanently closed, and the other passable for wheelbarrows only. The town appears to contain from 1,800 to 2,000 houses. It is nearly 3 miles in circumference and has a population of about 20,000. Chief


From Ichowfu
To Kiao chow
To Hsia-k'ou
North Gate
Temple
Telegraph Office
West Gate
East Gate
To Hsia-k'ou 3½ Miles
Hsia Ho
Small West Gate closed
Big South Gate
Small South Gate
To Hsia-k'ou
From Haichow
Magnetic North
TSINGKOW.
Scale 1/26,400 or 2·4" to 1 Mile.
500 Yards 0 500 1000 1500 Yards

exports (from Hsia-k'ou), beans, vegetable oils, pork, peanuts and fruit.

Surrounding Country.—The Hsia Ho (in March, a stream 10 yds. wide and 1 ft. deep), in a sandy bed, runs east past the South Gate of the town. It is crossed by two wooden bridges passable for wheelbarrows. The surrounding country is quite flat and open, and more or less cultivated. The port of Tsingkow is Hsia-k'ou, 3 miles east. In this part of Kiangsu the people are underfed and poor.

Supplies.—Supplies of the ordinary sort are obtainable, the town being a prosperous one. Water is from wells and from the Hsia Ho. Some of the well-water is brackish.

Transport.—Carts drawn by two or three bullocks or buffaloes are to be obtained to the number of about 200. Wheelbarrows are also extensively used. No boats come up the river to Tsingkow, but at Hsia-k'ou, the port, 80 junks were counted in the river, and 60 more were anchored 1 or 2 miles out to sea.

Government.—Tsingkow is governed by a Hsün-chien (Assistant Magistrate), subordinate to Kanyü. There are about a dozen police in the town.

Communications.—Wheelbarrow roads lead southward to Haichow and Sinpuchen, and northward through Jihchaohsien to Kiaochow. The road to Ichowfu westward is passable for carts. That running eastward to the port of Hsia-k'ou, a village of about 80 houses, is largely used by bullock carts. This place is at the mouth of the Hsia Ho, here a stream only 10 or 15 yds. wide, with water enough at spring tides to admit junks drawing 7 ft. at high tide. At neap tides there is a depth of only 5 or 6 ft. At low tide the river is nearly dry, and junks lie on the mud. Junks which are too big to come in lie 1 or 2 miles out, and their cargo is transported to the shore in boats. Hsia-k'ou is separated from the sea by about a mile of soft mud-flats. It is little frequented by steamers, and the trade is in the hands of natives.

There is a post office at Tsingkow, and telegraph offices there and at Hsia-k'ou.

Distances from Tsingkow

		miles	
To Haichow Sinpuchen	by land	19	Route 30 A
Jihchaohsien	,,	48	,, 30 A
Kiaochow	,,	124	,, 30 A

TSINGPUHSIEN

Approximate { Latitude, 31° 10′. Longitude, 121° 7′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1909.

Tsingpuhsien is a city and district about 20 miles west of Shanghai.

The City.—The city is of irregular shape, about $1\frac{3}{4}$ miles in perimeter. The wall is made of brick with a stone foundation. It is about 20 ft. high and 2 ft. thick, backed up on the inside by a bank 15 ft. high and 15 ft. thick. The bank is not revetted on the inside, and so is easily accessible anywhere from the interior of the city.

At a distance of from 2 to 10 yds. from the wall is a moat 20 to 40 yds. wide and 4 to 12 ft. deep. The shallowest places are at the North, East, and Small West Gates. The city has five gates—the North, South West, Great West, South and East Gates. At each of these, except the East Gate, there is a water-gate by which boats can pass under the wall and enter the city. At each gate the moat is crossed by a single-span wooden bridge on stone abutments. Each gate is protected in front by a wall similar to the city wall, enclosing a semicircular space of 20 yds. radius. The entrance gate to this semicircular space is, in the case of the North and South Gates, almost directly in front of the main city gate. In the other three gates it is at the side, being on the south side of the Small and Great West Gates, and on the north side of the East Gate.

The city is fairly well filled with houses, though there is also some cultivation. Outside the North Gate is a suburb of 100 houses, and outside the Small West Gate another of 50 houses. Altogether, inside and outside the walls, the city probably contains about 1,000 houses.

Surrounding Country.—The surrounding country is quite flat, highly cultivated, full of villages and farms, and much cut up by creeks.

Supplies.—Supplies of rice, flour, vegetables, fish, and pork are obtainable in considerable quantities. Tsingpuhsien, however, is not a large commercial place, and larger supplies would probably be obtainable at the market town of Chukiakio, 3½ miles to the south-west.

Transport.—Boats are the only means of transport used. No large quantities of boats are available here. The largest number collect near the South Gate, but even here only 20 were counted, of which the majority were about 10 to 20 ft. long and 3 or 4 ft. wide. There are no wheelbarrows.

Government.—Tsingpuhsien is a city of the Hsien class, the official being subordinate to Sungkiangfu. The military mandarin is said to be a Shou-pei (Captain) with a few soldiers under him for police purposes.

European residents.—The American Protestant Episcopal Church Mission has a branch here.

Communications.—The main launch route to Shanghai is that which leads northwards and joins the Soochow creek at Ssŭ-chiang-k'ou. Another route used by boats, although impassable for launches, goes eastward from the East Gate and joins the Sikawei creek near Szeking. It is also possible to reach Shanghai by going westwards through Chukiakio to the Wan-yü-t'ang lake, whence a water route goes off south-east by the Mao Hu to the Huang-p'u river, which it reaches 5 miles south-west of Sungkiangfu. From the South Gate a creek leads through Kuang-fu-ling to Sungkiangfu. From the great West Gate a launch route goes to Chukiakio, whence a creek, always passable for boats of 3 ft. draught, runs to Pingwang on the Grand Canal. There is a post office.

Distances from Tsingpuhsien

To Shanghai via Ssŭ-chiang-k'ou and Soochow Creek, 33¾ miles. Route 4 B.

To Shanghai via Szeking and Sikawei Creek, about 32 miles. Route 6 B.

To Chukiakio, 3½ miles. Route 4 B.

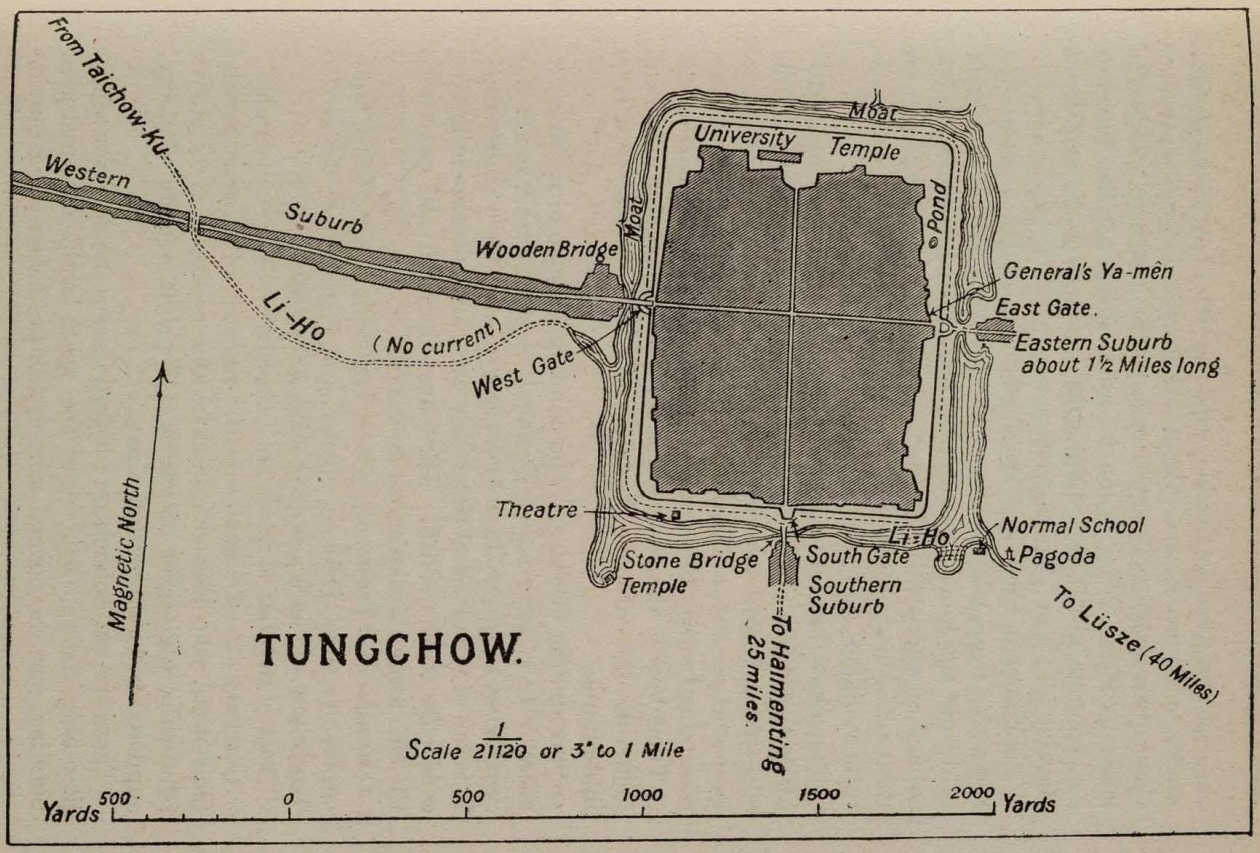
TUNGCHOW. (See Plan)

Approximate { Latitude, 31° 59′. Longitude, 120° 54′.

Authority : mainly G. E. Pereira, 1908.

The City and Suburbs.—Tungchow, recently officially named Nan-t'ung-hsien, is 5¾ miles by wheelbarrow road from the West Gate to Lao-lu-ching-chiang, its port on the Yangtse. The city is surrounded by the usual battlemented brick-wall, about 30 ft. high and in good repair, with a track about 12 ft. wide, paved with bricks running along the top of the interior embankment. Outside the walls there is a belt of land in most places 30 to 50 yds. wide, in others somewhat wider, with a few houses, trees, and bamboo clumps standing on it. Beyond this belt is a moat, for the most part over 100 yds. wide, but opposite the gates it narrows to under 10 yds., and is crossed by single-span bridges, that at the West Gate of planks and that at the South Gate of stone.

The Li Ho (or as it is occasionally called the Yen Ho) passes through this moat, through the west suburb (where it is crossed by a small single-arch stone bridge), and on to Taichow Ku, and joins the Grand Canal near Yangchow. On the other side, it leaves the moat at its extreme SE. corner (to the east of the Normal School), and after going south for a few hundred yards, turns east to Lüsze, some 53 miles distant. Two or three small and foul canals in the city join the moat just south of the East Gate, passing under a water-gate. A temple near the north wall takes the place of a North Gate. The gates on


From Taichow-Ku
Western
Suburb
Wooden Bridge
Moat
University
Temple
Moat
Pond
General's Ya-mên
East Gate.
Eastern Suburb
about 1½ Miles long
Li-Ho
(No current)
West Gate
Magnetic North
Theatre
Li-Ho
Normal School
Pagoda
Stone Bridge
Temple
South Gate
Southern
Suburb
To Haimenting
25 miles.
To Lüsze (40 Miles)
TUNGCHOW.
Scale 1/21120 or 3" to 1 Mile
Yards 500 0 500 1000 1500 2000 Yards

the east and west are double, with the outer entrances at right angles to the inner ones. The South Gate has a triple entrance, the centre one being at right angles to the other two. This gate leads to Haimenting, some 25 miles distant. The low but conspicuous hill (Lang Shan) with a pagoda on it is SSE. of the city and 6 or 7 miles distant.

Tungchow is roughly 1,100 yards from north to south, and 850 yards from east to west. There is very little waste space in it, and the houses are built of brick with tiled roofs. The suburb on the west is narrow and over a mile long ; that on the east is somewhat similar. On the south the suburb is rather smaller, and on the north there is none at all.

Tungchow has some importance on account of its cotton market. It is a progressive industrial centre with cotton and silk-spinning, and weaving factories, a mill for extracting oil from cotton-seed, a dyeing factory for cotton and silk fabrics, a canning factory for meat and fish, and other industries.

Tungchow is the centre of a thickly populated district, and including the suburbs probably contains 60,000 to 70,000 inhabitants.

Surrounding Country.—The country is flat and much cultivated. It is intersected by canals and trenches, restricting movement to the paths, which are available for wheelbarrows. It is full of villages and isolated houses, and trees are numerous especially to the south. The Lang Shan hill and pagoda to the SE. form a conspicuous landmark.

Supplies and Transport.—Very large quantities of rice, flour, vegetables, fish, chicken, ducks, and eggs are to be got in Tungchow. There are flour-mills in the town.

A large number of boats and wheelbarrows are obtainable.

Government.—Tungchow is the resident of a major-general (chên-t'ai), who has command of four camps of river guards (shui-shih) and three of militia. There is a body of police, supposed to be on modern lines.

There are two schools on modern lines ; the superior school (kao-têng hsüeh-t'ang) near the north wall, a two-storied building, and the normal school (shih-fan hsüeh-t'ang) outside

the south-east wall. There are two pagodas, one near the superior school and the other east of the normal school.

European Residents.—There is a missionary of the Foreign Christians Mission living at the west end of the west suburb, and the Jesuits have a native mission in the east suburb.

Communications.—Tungchow is connected with its port, Lao-lu-ching-chiang on the Yangtse, by a fairly good road much used by wheelbarrows. It is 8 ft. to 15 ft. wide, but liable to become heavy after rain. Steamers on the Yangtse going down from Chingkiang to Shanghai stop at T'ien-shêng-chiang, about $2\frac{1}{4}$ miles farther up the north bank, where the steamship companies have constructed landing-stages.

The water route by the Li Ho or Yen Ho (see Routes 20 B and 22) runs east to Lüsze and west to Taichow Ku and Siennümiao, and is regularly navigated by launches of the Ta-ta Company in both directions.

There is a post office and a telegraph office at Tungchow.

Distances from Tungchow

		miles	
To Lao-lu-ching-chiang	by land	$5\frac{3}{4}$	Route 20 A
Lüsze	water	53	,, 20 B
Fowning	land about	$222\frac{1}{2}$	,, 21 A
Haian	water	58	,, 21 B
Tungtaihsien	,,	84	,, 21 B
Yencheng Ku	,,	$136\frac{1}{2}$	,, 21 B
Fowning	,,	179	,, 21 B
,, via Huang-ts'un	,,	$212\frac{3}{4}$	,, 21 C
,, via Taichow Ku	,,	239	,, 21 C
Taichow Ku	,,	$98\frac{1}{4}$	,, 22
Siennümiao	,,	122	,, 22
Liu-cha	,,	$129\frac{1}{2}$	,, 22
Yangchow	,,	139	,, 22

TUNGTAIHSIEN

Approximate { Latitude, 32° 50′.
Longitude, 120° 14′.

Authority : G. E. Pereira, 1908.

The City.—Tungtaihsien is a long, straggling, unwalled city, some two miles long from east to west, and one mile broad. The houses are of brick, with tiled roofs. The streets are narrow and paved with bricks.

The Ch'uan-ch'ang Ho, coming from the south, flows in a northerly direction along the west side, and is joined by one branch of the Yen Ho (No. 2) at the SW. corner, and by another, the main branch, near the NW. corner. There are a good many side-creeks or canals intersecting the city. The river is covered with boats which often form a block in the channel.

There is a normal school here, and a superior primary school. All the teachers are now Chinese.

The Fan-kung-ti embankment runs through the city, and the magistrate's *yamên* is built on it. The general level is about 6 ft. above that of the river.

Surrounding Country.—The country around is flat and only a few feet above river-level. It is intersected by creeks. There is a considerable amount of cultivation—rice, wheat, beans, &c., and villages are numerous.

Foreign Residents.—There are no resident foreigners, though an American Mission has a native station and occasionally missionaries from Shanghai pay it a visit.

Communications.—Steam-launches run to Tungtaihsien along the Yen Ho (No. 2) from Taichow Ku, 40 or 45 miles distant, and continue north to Yencheng Ku. Another launch goes along the Ch'uan-ch'ang Ho daily, via

Liangtow	6	miles from	Tungtaihsien
Anfeng	8	,,	,,
Fuan Ku	16	,,	,,
Haian	26	,,	,,

There is a dam at the entrance to the Ch'uan-ch'ang Ho at Haian preventing launches from going on to Jukao. Launches from Tungtaihsien do not run to Haian in the winter, as there is not enough water.

The launch service from Taichow Ku to Hinghwa, from Taichow Ku via Tungtaihsien to Yencheng Ku, and from Tungtaihsien to Haian, are all owned by the Ta-ta Company.

There is a towpath along the Ch'uan-ch'ang Ho ; and the Fan-kung-ti which runs north and south-east from Tungtaihsien is a road raised 3 to 5 ft. above the level of the country on the east, but it is very variable in surface and is spoilt in places by numerous graves. In these places it degenerates into a footpath, used by passengers and wheelbarrows.

There is a post and telegraph office at Tungtaihsien.

Distances from Tungtaihsien

		miles	
To Tungchow	by water	84	Route 21 B
Haian	,,	26	,, 21 B
Yencheng Ku	,,	52½	,, 21 B
Fowning	,,	95	,, 21 B
Taichow Ku	,,	41½	,, 24 B

WOOSUNG

Approximate { Latitude, 31° 21′. Longitude, 121° 30′.

Authorities : Military Report on the Defences of the Yang-tzŭ Chiang River, 1906 ; Imperial Japanese Railways, Official Guide, vol. iv, 1915.

Woosung, locally called Wu-sung-tsêng, is a large village at the mouth of the Huang-p'u river and on the west bank. It is now open to foreign trade, and has undergone considerable development. Embankments have been built, streets laid out, and drainage installed ; and among the chief buildings are an hotel, a branch of the Shanghai Customs, and an office of the Great Northern Telegraph Company. The Shanghai–Woosung

Railway has a station one mile S. of the village, and another at Woosung Forts, a mile to the north; and there are large railway workshops where important repairs are carried out for the Shanghai–Nanking and the Shanghai–Hangchow lines as well as for the local line. The railway owns a large water frontage and a jetty equipped with shear-legs and a crane for landing heavy materials. There are, besides, wooden jetties (to which launches drawing 5 ft. can approach at low tide) at the Customs-house, at the Woosung Hotel, and at the light-house. Small boats could land at Woosung village, where the river is faced with baulks and boarding. There is an anchorage for ocean-going steamers off Woosung.

Surrounding Country.—The surrounding country is flat and little above sea-level at high tide; it is much intersected by tidal creeks, from 10 to 30 ft. wide and from 1 to 4 ft. deep at low tide; and there are frequent stone-slab bridges, with slabs from 1 to 2 ft. wide and from 8 to 10 ft. long which would give trouble to animals unaccustomed to crossing them. Numerous small villages with mud or wooden huts and clumps of trees and bamboos obstruct the view. The crops are wheat and rice. The soil is heavy after rain; and the fields are ridge and furrow, the latter being full of standing water after heavy rain, at which time the country is practically impassable for wheeled vehicles other than wheelbarrows. Woosung Creek, 90 yards wide for some distance inland and unfordable, runs into the Huang-p'u south of the village. It is spanned by the following bridges:

(1) $\frac{1}{4}$ mile from the mouth: a wooden pile-bridge with roadway 20 ft. wide; passable for all arms.

(2) $\frac{1}{2}$ mile from the mouth; railway bridge with iron girders and wooden piles; passable for all arms.

(3) Three miles from the mouth, on the pathway from Shanghai to Kiatinghsien: wooden, with 9 ft. roadway; unsafe for artillery.

There are, besides, two foot-bridges, respectively $2\frac{1}{4}$ and $3\frac{3}{4}$ miles from the mouth.

The Woosung Forts are about a mile north of the village,

on the river front, and another mile beyond them the Nan-shih-t'ang forts. The most prominent landmarks are the light-house and the look-out tower at Nan-shih-t'ang.

Supplies.—The water of the Yangtse and Huang-p'u rivers is fit for drinking, but should first be cleared and boiled. Fuel is obtainable in small quantities, wood of any other kind than bamboo being scarce. Considerable quantities of grain, especially rice, can be obtained in Woosung village. Supplies of forage are limited. Meat, other than pork, cannot be obtained; but poultry and fish are plentiful. As Shanghai is only 11 miles distant, there would be little difficulty in getting supplies thence.

Transport.—The only forms of transport, apart from the railway, are coolies, wheelbarrows, and boats—the last greatly predominating. Large numbers of native boats of all kinds, from small sampans drawing 8 or 9 in. to three-masted sea-going junks, are obtainable. The greater portion of the Shanghai trade is, however, carried there in ocean-going ships, or by the lighters of the Shanghai Tug and Lighter Company.

Communications.—The chief means of communication with Shanghai are the railway and the Huang-p'u river. The only metalled roads are the short roads constructed by the Woosung Land Improvement Syndicate, portions of the roads connecting the forts, and the road to the main magazine. The river-bund and the sea-wall is the only route possible for carts. Numerous pathways run in various directions, many of them paved in the centre for wheelbarrow traffic; but they are bad going after rain.

Post and telegraph office, and wireless stations (public and naval) here.

Distances from Woosung Forts

		miles	
To Shanghai	by rail	10	
,,	by water	12	
,,	along river-bund	15¼	Route 8 B
,,	by inland pathways	12	8 C
Liu-ho-k'ou	by land	17	7 E

WUSIH. (See Plan)

Approximate { Latitude, 31° 34′. Longitude, 120° 26′. Height, sea-level.

Authority: Military Report on the Province of Kiangsu (South), 1908; Imperial Japanese Railways, Official Guide, vol. iv, 1915.

The City.—Wusih, or Wu-hsi-hsien, locally pronounced Vu-si-yüen, is a walled city of the usual type, situated on the Grand Canal and the chief centre of the silk industry. The walls, which are in indifferent repair, are about 20 ft. high and 3 miles in perimeter; and they are surrounded by a moat about 15 yds. wide and 8 ft. deep. There are four gates and three sluice-gates. Between the North and South Gates this moat is double. There are extensive suburbs on the north, south, and west. The busiest streets (lined by the houses of brokers in rice and silk) are inside the wall between the North Gate and the West Gate. Wusih is the wealthiest of the interior cities of Kiangsu, and has a population estimated at 200,000.

The surrounding country is a flat plain intersected by numerous waterways, with a small range of hills a few hundred feet high about 3 miles to the west of the city.

The railway station lies outside the East Gate of the city.

There is a branch of the American Protestant Episcopal Church Mission at Wusih.

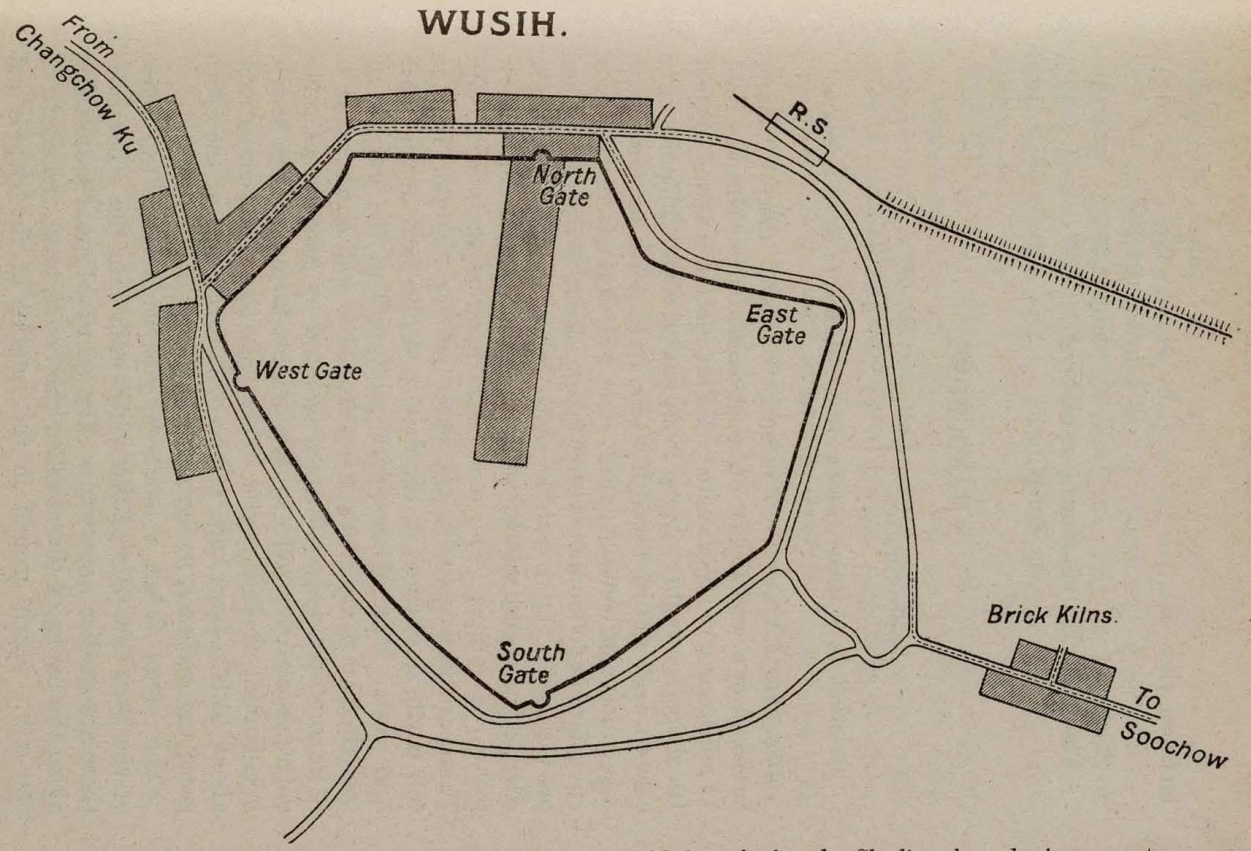
Communications. Wusih is served by the Shanghai–Nanking Railway and the Grand Canal. Smaller water routes connect it with Changshu Ku and Kiangyin on the east and north; and westward via Loshe with Ihing, Liyanghsien, Kaoshun, and Wuhu.

There are post and telegraph offices in the city.

Distances from Wusih

		miles	
To Soochow	by water	30¾	Route 1 A
,,	by rail	26·33	

WUSIH.



Sketch Plan. Dotted lines in canals show where boats are likely to be found. Shading shows business quarters.

		miles		
To Changchow Ku	by water	25¾	,,	1 A
,,	by rail	24·14		
Kiangyin	by water	23	,,	14
Changshu Ku via Huang-ni-tai	,,	27	,,	12 A
via Tungting	,,	29	,,	12 B

YANGCHOW

Approximate { Latitude, 32° 20′.
Longitude, 119° 24′.

Authority : A. H. Hilton-Johnson, 1908 ; Imperial Japanese Railways, Official Guide, vol. iv, 1915.

The City.—Yangchow, recently officially named Chiang-tu-hsien, is a walled city on west bank of the Grand Canal, 11 miles north of the Yangtse. Its population is about 100,000. Its shape is roughly oblong ; its length about 2½ miles from east to west and its breadth a mile from north to south, with a perimeter of some 9 miles. The wall consists of the usual crenellated and loopholed brick facing, about 25 ft. high, backed on the inside by a rubble earth bank about 30 ft. thick, revetted perpendicularly with brick, and accessible only by means of ramps. The wall is in good repair throughout. There are nine gates in the outer wall as follows : four in the north side, three in the east, and one each in the south and west. Most of them are protected on the outside by semicircular parapets built out from the wall and similar to it in construction, and are surmounted by gate-houses. The entrances are over 15 ft. square, and are furnished with heavy, iron-bound, wooden doors. There are four water-gates each about 10 ft. square, one at the SE. corner, one at the south gate, and one each in the north and west walls.

The canal forms a moat 40 yds. wide along the whole of the east and part of the south wall. On the other sides there are smaller waterways. The principal suburbs are those along the banks of the canal to the north, east, and south of the city. Much ground in the interior of the city is not

utilized, but it is to a great extent covered with ruins—relics of the T'ai-p'ing rebellion. These houses are well built of brick, with tiled roofs, and would afford very good accommodation. Probably the cleanest and most healthy part of the city is that inside the South Gate, near the SW. corner. A conspicuous building is the Wan-fo-lou temple on the eastern side.

The city is the centre of the administration of the salt of the Liang Huai district. The chief salt merchants live here and have formed powerful guilds. It is also the centre of an excellent rice-growing district. It has a large general trade. The principal industries are lacquerware and silverwork, but it produces no special article of commercial importance. It is a famous old city, formerly capital of the Yang kingdom, and the residence of numerous scholars, with a long-standing reputation as a pleasure resort.

Electric lighting has been installed.

Surrounding Country.—The surrounding country to the west is said to be high and fairly dry at all times of the year. To the east it is low-lying and much intersected by creeks.

Supplies.—Very large supplies of food, fuel, and forage would always be available. Good water is to be obtained from the canal and from wells.

Transport.—The means of transport consists almost entirely of wheelbarrows, donkeys, and boats. About 1,000 barrows and 800 boats of various suitable sizes would always be available. The latter lie in the canal, along the whole length of the city walls on its banks. Donkeys are used only for carrying grain sacks and similar loads not requiring pack-saddlery.

Government.—Yangchow in 1908 was a city of the *fu* class under the Tao-t'ai of Hwaianfu. The chief local officials were the Chih-fu or first-class district magistrate, and the two Chih-hsien or fourth-class district magistrates of Chiang-tu Hsien and Kan-ch'üan Hsien, which lie partly within the city, and were their headquarters. An official taking precedence of the above was the Assistant Salt Comptroller of the province, who also resided in the city.

There are about 500 police in the city and suburbs, and a small garrison in barracks on the east bank of the canal, near the NE. corner of walls.

European Residents.—The foreign missions represented are the China Inland, American Church, American Baptist, American Methodist and Episcopal, totalling about 50 men and women, besides the Roman Catholic Missions. The American Baptist Mission has a girls' school and a hospital.

Communications.—Communication is mainly north and south by the Grand Canal, and east by smaller creeks. With the exception of the path along the canal bank, north to Tsingkiangpu, with a break of 1½ miles at Liu-cha, and south to the Yangtse, roads are very few and local. There is regular steam-launch communication daily with Chinkiang, also with Tsingkiangpu, and less often with inland cities to the east.

There is a post and telegraph office in the city.

Distances from Yangchow (East Gate)

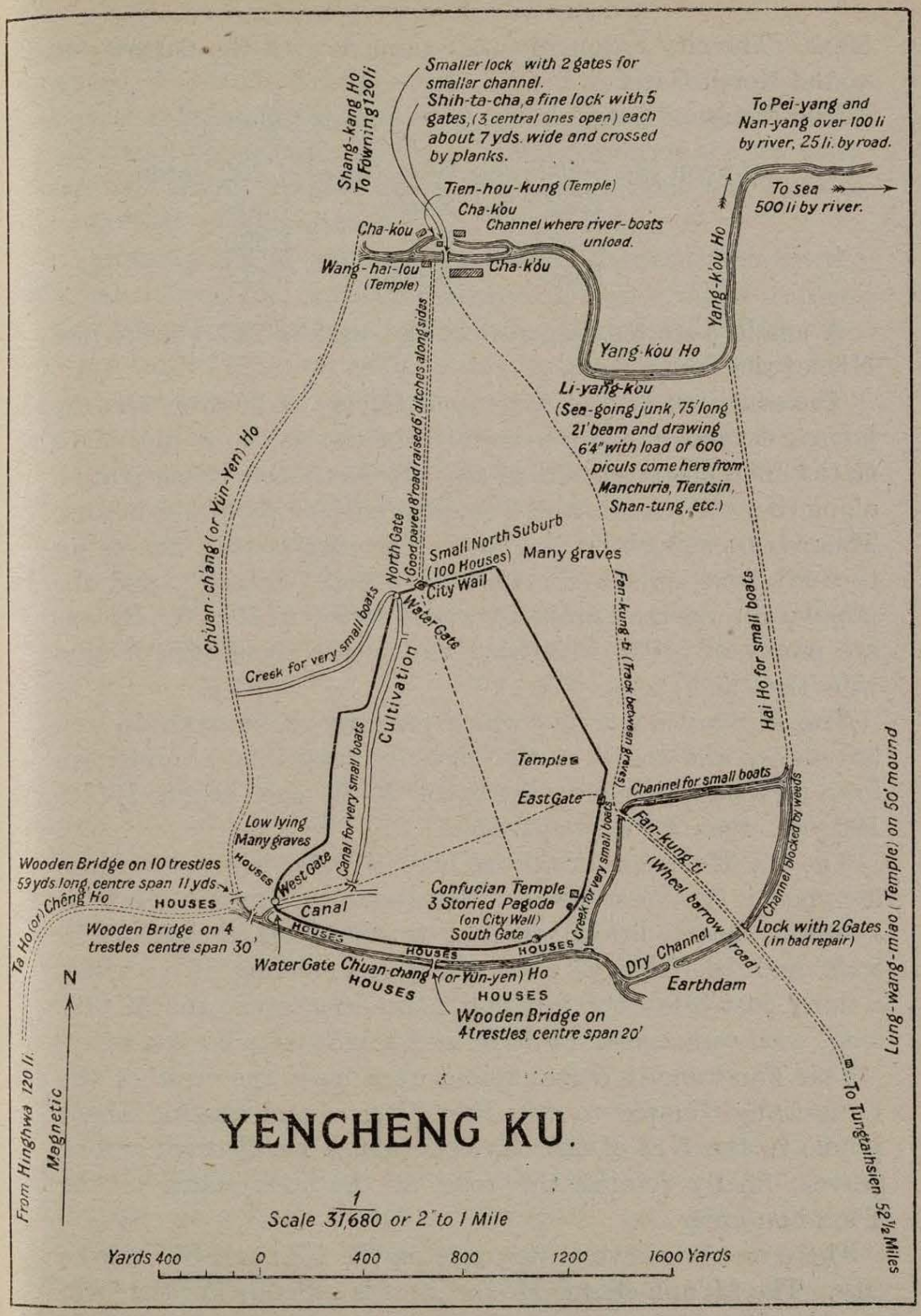
		miles	
To Chinkiang	by water	14¼	Route 19 (1)
Hwaianfu	,,	88½	,, 19 (1)
Tsingkiangpu	,,	97	,, 19 (1)
Taichow Ku	,,	40¾	,, 22
Tungchow	,,	139	,, 22
Pukow Ku	,,	57½	,, 36 A
,,	by land	about 61	,, 36 B
,,	by land and water	,, 61½	,, 36 C

YENCHENG KU. (See Plan)

Approximate { Latitude, 33° 23′.
Longitude, 120° 6′.

Authority: G. E. Pereira, 1908.

The City and Suburbs.—Yencheng Ku is surrounded by the usual battlemented brick wall, about 30 ft. high, in good repair, with a path about 3 to 5 ft. wide along the top of the


Smaller lock with 2 gates for smaller channel.
Shih-ta-cha, a fine lock with 5 gates, (3 central ones open) each about 7 yds. wide and crossed by planks.
Shang-kang Ho To Fowning 120 li
To Pei-yang and Nan-yang over 100 li by river, 25 li. by road.
To sea 500 li by river.
Tien-hou-kung (Temple)
Cha-kou
Channel where river-boats unload.
Cha-kou
Cha-kou
Wang-hai-lou (Temple)
Yang-kou Ho
Yang-kou Ho
Li-yang-kou
(Sea-going junk, 75' long 21' beam and drawing 6'4" with load of 600 piculs come here from Manchuria, Tientsin, Shan-tung, etc.)
Chuan-chang (or Yun-yen) Ho
Good paved 8' road raised 6' ditches along sides
North Gate
Small North Suburb (100 Houses)
Many graves
City Wall
Water Gate
Creek for very small boats
Cultivation
Fan-kung-ti (Track between graves)
Hai Ho for small boats
Temples
East Gate
Channel for small boats
Low lying Many graves
Houses
West Gate
Canal for very small boats
Fan-kung-ti (Wheel barrow road)
Channel blocked by weeds
Wooden Bridge on 10 trestles 59 yds. long, centre span 11 yds.
Cheng Ho
HOUSES
Canal
Confucian Temple 3 Storied Pagoda (on City Wall)
South Gate
Creek for very small boats
Lock with 2 Gates (in bad repair)
Wooden Bridge on 4 trestles centre span 30'
HOUSES
HOUSES
HOUSES
Water Gate
Chuan-chang (or Yun-yen) Ho
HOUSES
HOUSES
Dry Channel
Earthdam
Wooden Bridge on 4 trestles centre span 20'
Ta Ho (or) Chêng Ho
From Hinghwa 120 li.
N
Magnetic
Lung-wang-miao (Temple) on 50' mound
To Tungtaihsien 52½ Miles
YENCHENG KU.
1
Scale 31,680 or 2" to 1 Mile
Yards 400
0
400
800
1200
1600 Yards

bank. The city is roughly pear-shaped, with the narrow end at the North Gate.

The distances between the gates are as follows :

Between the	South	and	West	Gates,	1,192 yards
,,	West	,,	North	,,	1,508 ,,
,,	North	,,	East	,,	1,532 ,,
,,	East	,,	South	,,	744 ,,

A small 5-storied pagoda on the wall is 227 yds. to the NE. of the South Gate.

The southern part of the city is thickly built over, and the houses extend along the river from the south to the West Gate. The northern part of the city has a belt of cultivation along the walls inside, and a small suburb of about 100 houses. There is no suburb on the east. The magistrate's figures for the city and suburbs in 1908 were 5,485 houses ; and the population was then probably about 25,000 to 30,000. Houses are partly of brick, with tiled roofs ; the remainder of mud with thatched roofs.

The Ch'uan-ch'ang Ho which narrows to between 30 and 35 yds. to the south of the city, is crossed by a bridge on four trestles with centre span of 20 ft. and height 15 ft., 100 yds. west of the South Gate.

The Ta Ho from Hinghwa, here 50 yds. wide, flows into it opposite the West Gate. Just above the junction there is another wooden bridge on four trestles (centre span 30 ft. wide and 18 ft. high) over the Ch'uan-ch'ang Ho ; whilst a third, just below the junction, is on 10 trestles, and 59 yds. long, with centre span of 33 ft. and height from 20 to 24 ft.

The Fan-kung-ti embankment runs past the west of the Lung-wang Temple to the East Gate ; and passing about ½ mile to the NE. of the city, becomes a small track among graves, finally joining the road at the lock south of the T'ien-hou-kung.

There are extensive graveyards on the NE. and SW. of the city. The Ch'uan-ch'ang Ho (or, as it is called below the lock, the Yang-k'ou Ho) drains off all the rivers from this part of

the country. The Shangkang Ho, joined just above the lock by the P'i-ch'a Ho from the west, flows into the Ch'uan-ch'ang Ho just before it reaches the lock. The Shangkang Ho comes from near Shangkang, and is a continuation of the Ta-shih-wan Ho which, coming from Hwaianfu, flows south about ½ mile SW. of Shangkang.

Yencheng Ku is bounded on the south and west by the Ch'uan-ch'ang Ho, or, as it is more commonly called in these parts, the Yün-yen Ho. Coming from Tungtaihsien, 52½ miles to the south, it flows north, receiving the waters of the low-lying country to the west, known as the Hsia-ho, and discharging them by various rivers and canals into the sea. At the SW. corner of the city it is joined by the Ta Ho or Ch'êng Ho, which flows from Hinghwa, 40 miles to the SW.

Near the SE. corner of the city is the entrance to the Hai Ho, which is dammed about 200 yds. lower down. 300 yds. beyond this dam is a lock with two gates, in a state of considerable disrepair. This channel, from the dam to the point opposite the East Gate, where a creek (used by small boats) unites with it in its course north to join the Yang-k'ou Ho is dry or choked with reeds. About a mile to the NW. of the city, the Yang-k'ou Ho—which is really a continuation of the Ch'uan-ch'ang Ho—flowing east, passes through a fine lock with five gates, the two outer ones of which are dammed with earth, at Cha-k'ou, a village of 200 houses on both banks, with a fine temple (the T'ien-hou-kung) in its northern half. A smaller channel passes to the north of the T'ien-hou-kung through a lock with two gates, and unites a short way beyond with the main channel. The current of this river is very strong. After a bend of about ¾ mile to the SE. it passes Li-yang-k'ou, a village of 30 houses on the south bank, constituting the port of Yencheng Ku, and about ¾ mile from the North Gate. Sea-junks from Tientsin, Manchuria, Chefoo, Shanghai, and other places, can reach this point. One junk was seen that had brought beancake from Manchuria, 88 ft. long by 25 ft. wide, drawing 6 ft. 4 in. of water when full, and capable of carrying 600 piculs

(36 tons). The crew numbered sixteen and stated that, with a favourable wind, they could reach Chefoo in ten days. Another 33 miles down the river (8 miles by land) are the villages of Pei-yang and Nan-yang facing each other. There are no houses at Hai-k'ou where it reaches the sea, 167 miles by water from Yencheng Ku. The Yang-k'ou Ho is here about 50 yds. wide.

A narrow creek for very small boats, connected with the river on the west, flows through a water-gate in the city wall, 92 yds. west of the North Gate. It is connected with another small channel from the same river entering similarly at the West Gate. Small canals from these water-gates intersect the city.

Trade.—Yencheng Ku has a large trade with Shanghai and the north.

Transport.—Wheelbarrows are plentiful; but there do not seem to be any horses, mules, or donkeys, and there are no carts.

Government and Garrison.—There are several river gunboats, but no regular soldiers. The police force is over 200, and appears to be untrained, though they profess to do German drill.

Foreign Residents.—There is a branch of the American Church Mission here with four residents, men and women.

Communications.—Steam-launches, belonging to the Ta-ta Company, ply daily between here and Taichow Ku, via Tung-taihsien. It is stated that the river between these towns is never frozen, though in a very severe winter it may be so between here and Fowning for about ten days in January. It was last frozen in 1902. Steam-launches do not go to Hinghwa or Fowning. River boats ascending from Hai-k'ou lie in the smaller northern channel to the north of the T'ien-hou-kung to discharge their cargoes.

A fine raised road, paved with bricks, runs for $\frac{3}{4}$ mile due north from the North Gate to the lock across the Yang-k'ou Ho and to the T'ien-hou-kung.

There is a post office at Yencheng Ku.

Distances from Yencheng Ku

		miles	
To Shangkang	by water	17	Route 21 B
Fowning	,,	$42\frac{1}{2}$	,, 21 B
Tungtaihsien	,,	$52\frac{1}{2}$	,, 21 B
Tungchow	,,	$136\frac{1}{2}$	,, 21 B
Taichow Ku	,,	about 76	,, 24 A
,,	,,	94	,, 24 B
,,	,,	$106\frac{1}{4}$	,, 24 C
Liu-cha	,,	105 to 135	Routes 24 A, B, C, and 25 A
Hwaianfu	,,	$74\frac{1}{2}$ and 105	,, 25 B and C
Hai-k'ou	,,	about 61	,, 25 D

APPENDIX I

TRANSLITERATION OF PLACE-NAMES

SEVERAL different systems are in current use for the romanization of Chinese. Each foreign country is naturally inclined to transcribe the sounds of the characters in conformity with its own spelling. Thus, the French would have ' tch ' where we write ' ch ', and ' ch ' for our ' sh '. The Morrison system, now almost obsolete, aimed at reproducing Chinese characters in a purely English form of spelling. Owing to our peculiar vowel-sounds, however, this system could hardly be adopted by other than Anglo-Saxon nations. The system of transliteration for Pekingese, known as the Wade orthography after the name of its inventor, may be regarded somewhat in the light of a compromise. In this, broadly speaking, it may be said that the vowels have their ordinary Continental values, while the semi-vowels (' w ' and ' y ') and the consonants are used more or less as in English. Hence we have *li*, not *le* or *lee*, and *wan* instead of *ouann*. All aspirates are indicated by an inverted comma : thus, *t'a*, pagoda, is distinguished from *ta*, great.

Convenient though the Wade orthography has proved for the transliteration of Northern Mandarin, as well as for general literary and scholastic purposes, there are strong reasons to be urged against its uniform adoption in a handbook on Kiangsu, where the principal dialects spoken are those of Shanghai and Southern Mandarin. In the list of place-names compiled by the Chinese Post Office, which is likely to become the standard spelling, the local pronunciation is generally followed. For the sake of simplicity, aspirates are omitted and no hyphens are used between the syllables. Names with the same sound are distinguished by adding either the province or the official status of the town. Thus, Taichow Ku (Kiangsu)

is distinguished from Taichow Sha (Shansi) and Taichowfu in Chekiang; Chüchow Sung (Shantung) from Chüchowfu in Chekiang; and Taiping An (Anhwei) from numerous other towns of the same name, including Taipinghsien, also in Anhwei. According to this system, the names of places at which different dialects are spoken may be found written in totally different ways although the characters are identical: e. g. 'Hengkiang' in Kiangsi is the same in Chinese as 'Wongkong' in Kwangtung.

In the Routes all place-names occurring in the Postal Guide (1916 edition) have been written in the form given there. This can readily be distinguished from other spellings by the fact that syllables are not separated by hyphens. With regard to other names, the Wade orthography has been adopted as far as possible; that is to say, wherever the Chinese characters are known, or the Wade form is obtainable from some trustworthy source. In these names the syllables are divided by hyphens. There is a residue of places, too small to be found on any Chinese map, the names of which are probably romanized from the local pronunciation and cannot be rendered with certainty in the Wade form. Such names have perforce been allowed to stand as they are. Not infrequently an alternative name or a local pronunciation has been added in brackets to the Post Office or Wade spelling.[1]

In using the subjoined list of words commonly occurring in Chinese place-names, it should be borne in mind that, although you can always get the sound of a word when the character is given, you cannot proceed vice versa and deduce the character or the meaning from the sound alone. The reason is that in Chinese the same sound often has to do duty for a large number of different words. There are many cases, however, in which a guess can be made that approximates to certainty.

[1] The Wade spelling of all the Post Office names has been given in the Index, except where no essential difference exists.

APPENDIX II

GLOSSARY OF COMMON TERMS USED IN GEOGRAPHICAL NOMENCLATURE

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
安	An	ngan, ê	peace
閘	cha	za, zo	lock, weir
寨	chai	za, sei	stockade
站	chan	zän, tsän	stage, station
長	ch'ang	zang, sang	long
常	ch'ang	zang	constant
鎮	chên	tsên, tsêng	market town
城	ch'êng	zêng	walled city
集	chi	tsi, tsih	small town
溪	ch'i	ki	mountain stream
七	ch'i	ts'i	seven
家	chia	ka	family, home
嘉	chia	kia, ka	excellent
江	chiang	kiang, kang	river
港	chiang	kang	harbour, anchorage
橋	ch'iao	kiao, jau	bridge
界	chieh	kai, ka	boundary

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
街	chieh	kai, ka	street
前	ch'ien	sien, sie, zie, tsie	front, before
金	chin	kin, ching	metal, gold
青	ch'ing	tsing	green
清	ch'ing	tsing	pure
九	chiu	kiu	nine
邱	ch'iu	kiu	mound, tumulus
州	chou	tseu, tsê	a 'department' (district or city of the third class)
洲	chou	tseu	islet
周	chou	tsou	all round, complete
川	ch'uan	ch'ü	stream
莊	chuang	tsuang, tsang, zang	farm, small village
中	chung	tsung	middle
二	êrh	ni, nyi	two
方	fang	faung	square
房	fang	vaung	house
豐	fêng	fong	abundant
府	fu	foo	prefecture (district or city of the first class)
福	fu	fo, fok	happiness
海	hai	heh, he, hae	sea

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
行	hang	aung	row, order
黑	hei	huh	black
河	ho	hu, wu	river, creek, canal
合	ho	eh	junction
後	hou	ʻeu, wo	back, after
西	hsi	si	west
下	hsia	ʻau	lower, below
巷	hsiang	hang	side street
小	hsiao	siao	small
縣	hsien	yüen, yoen	district or city of the fourth class
新	hsin	sing	new
興	hsing	hyung	rise, prosperous
湖	hu	wu	lake
黃	huang	wang	yellow
一	i, yi	ih	one
岡	kang	kaung	ridge
高	kao	kau	high
溝	kou	keu, kei	nullah, ditch, watercourse
口	kʻou	kʻeu, kʻei	mouth, port, mountain pass
古	ku	koo	ancient

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
官	kuan	kwen	official
關	kuan	kuei	pass, customs barrier
廣	kuang	kwaung	broad
貴	kuei	kwe	honourable
藍	lan		blue
老	lao		old
里	li		measure of distance (generally about $\frac{1}{3}$ mile)
梁	liang		beam, plank, bridge
林	lin	ling	grove, forest
臨	lin		approach
陵	ling		mound
嶺	ling		mountain range, col
六	liu	lo, lok	six
柳	liu	lieu, lo	willow
劉	liu		slay, a surname
流	liu	lieu	flow
羅	lo	lu	net, sieve
樓	lou	leu	storey, tower
路	lu		road
龍	lung	long, lo	dragon

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
馬	ma	mo	horse
門	mên	mêng	gate
廟	miao		temple
明	ming		bright
木	mu	mo	wood, tree
南	nan	nên, nê, no	south
內	nei		inside
甯	ning		repose, tranquil
牛	niu		ox, cow
壩	pa	po	embankment, dam, haul-over
八	pa		eight
白	pai	pa, po	white
堡	pao	pu	rampart, outpost
北	pei	po, pu, pok	north
浜	pêng	pang	creek, canal
平	p'ing	bing	level, peace
埠	pu, fou		port
浦	p'u		reach, tributary, creek
舖	p'u		shop
三	san		three

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
沙	sha	so, sho	sand
山	shan	sän, sei	hill, mountain
上	shang	zang, sang	upper, above
石	shih	sa, za	stone
十	shih	zeh	ten
市	shih	ssŭ, tzŭ	market
雙	shuang	sang, suang	couple
水	shui	ssŭ	water
所	so		place, fortified camp
司	ssŭ	sze	township
四	ssŭ		four
寺	ssŭ		monastery, temple
松	sung		pine tree
大	ta	t'ai, tu	great
塔	t'a		pagoda
太	t'ai		great, very
臺	t'ai	ta, tei	terrace, fort
丹	tan		cinnabar, red
潭	t'an	den	pool
黨	tang		village

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
塘	t'ang		pond, lake, dyke
道	tao		way, road
德	tê	teh, tei, tuh	virtue
堤	ti		dyke, embankment
店	tien	ti, tie	inn
天	t'ien	t'ie	heaven
廳	t'ing		sub-prefecture (district or city of the second class)
頭	t'ou	tou, tei	head
澤	tsê		swamp, marsh
村	ts'un	ts'ên, ts'êng	village
渡	tu		ferry
東	tung	tong	east
洞	tung	dong	hollow, cavern, spillway
子	tzŭ	tsze, ts	a suffix added to some words without changing their meaning.
窪	wa		hollow, valley, swampy ground
外	wai	nga	outside
灣	wan	wän	bay, curve
王	wang		king, prince
衛	wei	we	garrison, fortified place

Character.	*Pekingese (Wade).*	*Other Kiangsu dialects.*	*Meaning.*
武	wu	voo	martial
吳	wu	ng, ung	name of ancient kingdom in Kiangsu
五	wu	ng, ung	five
洋	yang		ocean, foreign
楊	yang		raise, Yangtse
楊	yang		willow
陽	yang		male principle, sun, south
陰	yin		female principle, dark
營	ying	yung	camp
園	yüan	yoen, yüe	garden, enclosure
永	yung		long, eternal

APPENDIX III

TABLE 1. LIST OF PRINCIPAL RIVER STEAMERS PLYING ON THE YANGTSE IN 1916

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
BRITISH								
China Navigation Company (Messrs. Butterfield & Swire)								
Kinling	1904	steel	310·0	46·0	28·5	2,511	3,397	340 screw
Ngan-kin	1883	,,	289·5	43·2	20·3	2,101	2,732	200 ,,
Poyang	1891	,,	287·7	43·0	27·9	1,892	2,551	250 ,,
Shasi	1891	,,	186·1	35·2	16·4	811	1,090	90 ,,
Tatung	1891	,,	286·7	43·0	27·9	1,882	2,548	250 ,,
Tung-ting	1900	,,	270·0	42·1	24·2	1,264	2,036	190 ,,
Indo-China Steam Navigation Company (Messrs. Jardine, Matheson & Co.)								
Chang Wo	1891	steel	200·0	40·0	7·8	696	1,065	80 paddle
Kiang Wo	1901	,,	280·0	42·1	17·2	1,354	2,175	200 screw
Kut Wo	1895	,,	290·0	43·0	11·7	1,924	2,665	250 ,,
Loong Wo	1906	,,	330·0	46·1	14·5	2,386	3,923	600 ,,
Sin Wo	1896	,,	290·0	43·1	11·8	1,931	2,672	250 ,,
Tuck Wo	1904	,,	330·0	46·1	14·2	2,355	3,770	350 ,,
Tung Wo	?						1,350	

Table 1. *List of Principal River Steamers plying on the Yangtse in* 1916 (*continued*)

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
CHINESE								
China Merchants Steam Navigation Co.								
Kwei Lee . . .	1893	steel	250·0	40·0	—	879	—	94 twin screw
Kiang teen . . .	1870	iron	273·2	—	13·9	1,368	2,012	333 paddle
Kiang yu . . .	1883	steel	300·0	42·0	13·4	2,270	3,098	459 ,,
Kiang Kwan . . .	1876	iron	300·0	40·2	12·8	1,450	—	366 ,,
Kiang yung . . .	1876	,,	300·0	40·2	12·7	1,451	—	366 ,,
Kiang tung . . .	1871	,,	218·0	31·2	9·0	340	566	188 ,,
Kiang foo . . .	1874	composite	295·5	50·0	11·5	1,468	2,330	366 ,,
Kuling . . .	1885	steel	160·0	27·0	7·0	150	498	— twin screw
GERMAN								
Hamburg-Amerika Line (Melchers & Co.).								
Mei Lee . . .	1900	steel	247·7	30·0	11·9	1,151	1,682	82 twin screw
Mei Shun . . .	1900	,,	247·7	30·0	11·9	1,151	1,682	82 ,,
Mei Dah . . .	1900	,,	247·7	30·0	11·9	1,151	1,682	82 ,,
Mei Yu . . .	1901	,,	200·0	40·0	8·0	711	1,114	116 stern wheel

Table 1. *List of Principal River Steamers plying on the Yangtse in* 1916 (*continued*)

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
JAPANESE								
Nisshin Kisen Kaisha								
Yuen Kiang Maru . .	1903	steel	202·6	37·4	6·5	579	935	61 twin screw
Datei Maru . . .	1901	—	—	—	—	—	2,711	
Hoyo Maru. . . .	1915	—	—	—	—	—	4,000	— twin screw
Nan Yang Maru . .	1907	steel	320·0	43·4	13·8	2,224	3,588	243 ,,
Shang Yang Maru . .	1907	—	—	—	—	—	3,588	— ,,
Siang Kiang Maru . .	1903	steel	202·6	37·4	6·5	579	935	61 ,,
Tachi Maru . . .	1901	,,	278·0	39·4	9·6	1,288	2,078	122 ,,
Taifuku Maru . . .	1900	—	—	—	—	—	2,836	— ,,
Talee Maru. . . .	1900	steel	278·0	39·4	11·7	1,315	2,247	202 ,,
Tahung Maru . . .	1905	,,	240·6	39·4	9·7	1,090	1,759	100 ,,
Tayuen Maru . . .	1899	,,	238·7	39·5	9·1	1,051	1,695	100 ,,
Yoh Yang Maru . .	1906	,,	310·0	44·0	14·5	2,224	3,588	243 ,,

TABLE 2. LIST OF PRINCIPAL STEAMERS PLYING TO SHANGHAI AND THE COAST PORTS OF CHINA IN 1916

N.B.—All coasting steamers can also navigate the Yangtse, but in winter only ships of 10 ft. draught or less can count on reaching Hankow.

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
BRITISH								
China Navigation Company (Messrs. Butterfield & Swire)								
Anhui	1903	steel	300·0	40·1	20·6	1,350	2,201	314 screw
Changchow	1901	,,	275·0	38·2	21·5	1,203	1,948	250 ,,
Chekiang	1914	—	—	—	—	—	2,172	— —
Chenan	1903	steel	300·0	40·1	20·9	1,350	2,200	314 ,,
Chengtu	1914	—	—	—	—	—	2,219	— —
Chihli	1895	steel	260·0	38·1	21·3	1,143	1,862	250 ,,
Chingtu	1886	,,	315·2	38·2	23·8	1,459	2,268	400 ,,
Chinhua	1903	,,	299·7	40·1	20·6	1,349	2,198	314 ,,
Chusan	1914	—	—	—	—	—	2,217	— —
Chinkiang	1898	steel	275·5	38·2	21·4	1,229	1,986	250 ,,
Chungking	1914	—	—	—	—	—	2,171	— —
Fengtien	1905	steel	267·5	40·1	17·1	1,073	1,765	325 ,,
Fatshan	1887	—	—	—	—	—	1,727	twin screw

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 (*continued*)

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
Foochow . . .	1895	steel	275·6	38·2	21·4	1,228	1,994	250 screw
Hangchow . . .	1885	,,	259·7	33·1	23·2	999	1,572	180 ,,
Hanyang . . .	1901	,,	275·5	38·2	21·5	1,207	1,956	250 ,,
Hoihow	1880	iron	248·9	31·3	23·2	869	1,411	160 ,,
Hsin Pekin . . .	1906	—	—	—	—	—	2,866	— twin screw
Huichow . . .	1905	steel	267·0	40·2	21·7	1,217	1,993	268 screw
Hunan	1895	,,	260·0	38·1	21·3	1,143	1,862	250 ,,
Hupet	1901	,,	275·2	38·2	21·5	1,203	1,951	250 ,,
Ichang	1898	,,	275·5	38·2	21·4	1,228	1,984	250 ,,
Kaifong	1888	steel	256·3	36·3	21·6	987	1,622	250 screw
Kalgan	1895	,,	260·8	38·1	21·3	1,143	1,862	250 ,,
Kanchow . . .	1905	,,	267·2	40·2	21·7	1,217	1,993	268 ,,
Kansu	1895	,,	259·5	38·1	21·3	1,143	1,862	250 ,,
Kashing	1895	,,	259·5	38·1	21·3	1,143	1,862	250 ,,
Kian	1907	—	—	—	—	1,195	—	— twin screw
Kiukiang . . .	1898	steel	275·8	38·2	21·4	1,228	1,985	250 screw
Kwangse . . .	1898	,,	275·2	38·2	21·4	1,228	1,985	250 ,,
Kueichow . . .	1905	,,	267·1	40·2	21·7	1,215	1,992	268 ,,
Kweilin	1891	,,	260·0	36·8	21·6	1,073	1,742	200 ,,

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 *(continued)*

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
Kweiyang	1890	steel	255·0	36·1	21·8	1,044	1,718	250 screw
Liangchow	1905	,,	266·9	40·2	21·7	1,215	1,990	268 ,,
Linan	1903	,,	300·2	40·1	20·6	1,352	2,203	314 ,,
Luchow	1905	,,	266·9	40·2	21·7	1,216	1,992	268 ,,
Ningpo	1898	,,	275·4	38·2	21·4	1,228	1,985	250 ,,
Pakhoi	1895	,,	274·8	38·2	21·4	1,227	1,992	250 ,,
Paoting	1891	,,	260·0	36·8	21·6	1,073	1,742	200 ,,
Shansi	1898	,,	275·4	38·2	21·4	1,228	1,984	250 ,,
Shasi	1910	—	—	—	—	—	1,327	— twin screw
Shaohsing	1901	steel	290·0	40·2	20·6	1,307	2,123	280 screw
Shenking	1895	,,	260·0	38·2	17·5	1,034	1,650	290 ,,
Shuntien	1904	,,	267·0	40·1	17·1	1,081	1,758	325 ,,
Siangtan	1905	,,	220·0	40·0	9·5	729	1,195	54 ,,
Singan	1890	,,	256·0	36·2	21·5	1,047	1,654	200 ,,
Sinkiang	1915	—	—	—	—	—	2,646	— —
Sung Kiang	1888	steel	256·3	36·3	21·6	937	1,622	250 ,,
Szechuen	1895	,,	260·7	38·1	21·3	1,143	1,862	250 ,,
Taming	1903	,,	299·7	40·1	20·6	1,350	2,200	314 ,,
Tamsui	1880	iron	250·2	31·2	23·1	919	1,424	160 ,,

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 *(continued)*

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
Tean	1904	steel	299·8	40·1	20·6	1,346	2,193	314 screw
Tientsin	1895	,,	275·3	38·2	21·4	1,227	1,992	250 ,,
Tungchow	1914	—	—	—	—	—	2,104	— —
Wenchow	1878	iron	220·1	28·5	18·8	560	898	99 ,,
Wuchang	1914	—	—	—	—	—	3,204	— twin screw
Wuhu	1895	steel	275·1	38·2	21·4	1,227	1,992	250 screw
Yingchow	1905	,,	266·8	40·2	21·7	1,216	1,992	268 ,,
Yochow	1901	,,	290·0	40·2	20·6	1,306	2,127	280 ,,
Yunnan	1901	,,	275·2	38·2	21·3	1,206	1,953	250 ,,
Indo-China Steam Navigation Company (Messrs. Jardine, Matheson & Co.)								
Cheong Shing	1905	steel	265·5	40·0	20·9	1,256	1,989	211 screw
Chip Shing	1906	,,	265·0	40·2	21·0	1,199	1,984	215 ,,
Choi Sang	1902	,,	290·0	42·1	22·5	1,424	2,284	200 ,,
Chun Sang	1896	,,	290·0	40·3	24·0	1,418	2,218	270 ,,
E Sang	1891	,,	260·0	36·1	22·0	1,127	1,783	175 ,,
Fau Sang	1896	,,	290·0	40·0	22·7	1,410	2,251	270 ,,
Fook Sang	1905	,,	331·3	44·2	24·2	1,987	3,100	330 ,,
Foo Sang	1903	,,	290·8	42·1	22·7	1,423	2,284	200 ,,

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 *(continued)*

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
Hang Sang . . .	1901	steel	290·3	42·0	22·5	1,356	2,143	225 screw
Hin Sang . . .	1890	,,	290·0	40·1	22·5	1,536	2,412	220 ,,
Hop Sang . . .	1901	,,	290·0	43·0	22·5	1,350	2,149	225 ,,
King Sing . . .	1895	,,	260·8	38·2	22·0	1,223	1,983	300 ,,
Koon Shing . . .	1905	,,	265·0	40·2	21·1	1,333	2,130	238 ,,
Kum Sang . . .	1899	,,	335·0	43·3	26·0	2,078	3,237	369 ,,
Kut Sang . . .	1905	,,	385·5	51·3	28·5	3,110	4,895	500 ,,
Kwong Sang . . .	1902	,,	290·0	42·1	22·5	1,428	2,283	200 ,,
Lai Sang . . .	1901	,,	350·5	44·2	25·7	2,225	3,460	400 ,,
Lien Shing . . .	1890	,,	250·0	36·1	21·5	1,049	1,629	175 ,,
Lok Sang . . .	1891	,,	250·0	36·1	22·5	979	1,560	150 ,,
Loong Sang . . .	1896	,,	260·0	36·4	20·4	1,093	1,738	220 ,,
Mausang . . .	1893	,,	275·6	37·6	18·5	1,644	2,161	200 ,,
Nam Sang . . .	1902	,,	370·3	47·2	27·2	2,591	4,035	450 ,,
On Sang . . .	1895	,,	310·0	40·6	25·5	1,787	2,802	250 ,,
Sui Sang . . .	1895	,,	309·9	41·1	25·2	1,776	2,790	300 ,,
Tai Sang . . .	1883	iron	290·0	40·0	23·9	1,544	2,383	300 ,,
Tak Sang . . .	1892	steel	250·0	36·1	22·5	977	1,562	150 ,,
Ting Sang . . .	1900	,,	265·3	35·2	21·4	1,045	1,650	225 ,,

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 *(continued)*

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
Tung Shing	1903	steel	275·4	40·0	20·0	1,173	1,869	200 screw
Wai Shing	1903	,,	275·3	40·0	20·1	1,170	1,865	200 ,,
Wing Sang	1883	iron	290·5	40·2	24·0	1,517	2,339	188 ,,
Wo Sang.	1891	steel	260·0	36·1	22·0	1,127	1,783	175 ,,
Yat Shing	1904	,,	290·4	42·1	22·6	1,424	2,284	200 ,,
Yik Sang.	1902	,,	282·0	40·0	20·4	1,236	1,967	176 ,,
Yuen Sang	1889	,,	250·2	36·2	23·6	1,128	1,753	200 ,,
Chinese Engineering & Mining Co., Ltd.								
Kailan	1914	—	—	—	—	—	229	— screw
Kaiping	1905	steel	312·0	44·3	20·8	1,605	2,563	480 ,,
Kwang Ping	1898	,,	265·0	40·2	20·9	1,243	1,999	200 ,,
Geo. McBain, Shanghai								
Tong Hong	1891	—	—	—	—	—	2,184	— —
CHINESE								
China Merchants' Steam Navigation Co.								
An-ping	1896	steel	265·0	40·1	21·4	1,159	1,857	181 screw
Chi-yuen	1881	iron	284·9	34·2	18·3	1,177	1,873	180 ,,
Feiching	1883	,,	253·0	36·0	13·3	980	1,539	188 ,,

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 (continued)

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
Hae-an	1873	iron	244·0	33·0	18·2	837	1,344	169 screw
Hsin Chang	1905	steel	270·3	40·1	20·3	1,258	2,000	162 ,,
Hsin Chi	1892	,,	260·0	37·0	21·3	1,385	1,846	150 ,,
Hsin-fung	1891	,,	260·0	37·0	21·3	1,385	1,846	150 ,,
Hsin Kong	1906	,,	270·0	40·1	20·3	1,262	2,146	162 ,,
Hsin Ming	1907	—	—	—	—	—	2,133	— —
Hsin-yu	1889	,,	250·0	36·1	19·8	1,038	1,629	125 ,,
Irene	1890	,,	219·0	40·0	12·5	826	1,343	142 ,,
Kiang Hsin	1905	,,	325·0	44·0	14·6	2,101	3,372	311 twin screw
Kiang Wah	1912	—	—	—	—	—	3,692	— ,,
Kung Ping	1894	steel	320·0	46·0	21·1	1,742	2,705	222 ,,
Kwang Chi	1887	,,	185·0	27·0	11·0	313	505	57 ,,
Kwang Lee	1883	,,	280·0	40·0	25·4	1,468	2,359	249 screw
Kwang Tah	1883	,,	280·0	40·0	17·9	1,536	2,474	299 ,,
Poochi	1882	,,	209·7	35·4	14·8	631	1,049	101 twin screw
Taishun	1896	,,	265·0	40·1	21·2	1,216	1,962	156 screw
Too Nan	1881	iron	253·2	36·1	27·3	942	1,537	172 ,,
Tung Wah	1906	—	—	—	—	—	1,176	— —
Yu Shun	1900	steel	260·2	40·2	18·3	1,079	1,696	169 ,,

Table 2. List of Principal Steamers plying to Shanghai and the Coast Ports of China in 1916 *(continued)*

Name of Ship.	*When Built.*	*Material.*	*Dimensions.*			*Registered Tonnage.*		*Horse-power and Description of Propeller.*
			Length. Ft.	*Breadth.* Ft.	*Depth of Hold.* Ft.	*Net.*	*Gross.*	
GERMAN								
Hamburg–Amerika Line (Melchers & Co.)								
Admiral von Tirpitz	1905	steel	261·1	40·0	19·5	1,199	2,007	148 twin screw
Gouverneur Jaeschke	1900	,,	240·4	36·0	20·9	1,045	1,738	204 screw
Peiho	1899	,,	188·4	28·4	9·8	417	756	87 ,,
Sikiang	1907	,,	260·8	40·3	16·2	1,015	1,840	177 ,,
Staatssekretar Kraetke	1905	,,	261·2	40·2	19·6	1,209	2,009	148 twin screw
Tsintau	1891	,,	239·3	38·0	13·4	977	1,588	159 ,,
JAPANESE								
Nippon Yusen Kaisha								
Hakuai Maru	1898	steel	312·0	39·2	18·7	1,436	2,636	374 screw
Kasuga Maru	1898	,,	375·0	44·1	25·0	2,368	3,820	580 ,,
Kosai Maru	1899	,,	312·0	39·2	18·7	1,423	2,635	377 ,,
Osaka Shosen Kaisha								
Bujun Maru	1908	steel	262·0	35·1	19·9	1,300	1,810	138 screw
Choshu Maru	1896	,,	255·4	36·7	19·9	1,203	1,670	137 ,,
Choshun Maru	1907	,,	262·0	35·2	19·9	1,304	1,811	138 ,,
Shinchiku Maru	1890	,,	320·0	41·8	18·1	1,938	3,127	234 ,,
Soshu Maru	1897	,,	259·0	34·9	21·2	1,119	1,805	183 ,,

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APPENDIX IV

LIST OF POST AND TELEGRAPH OFFICES IN THE PROVINCE OF KIÅNGSU

(*Corrected up to September*, 1916.)

NOTE.—H. O. indicates Head Office; I, First Class Office; II, Second Class Office; III, Third Class Office; A., Agency; T., Telegraph.

Anchen, A.	安鎮	Changtsun Ku, A.	張村
Anfeng, A.	安豐	Changtzeshan, A.	張芝山
Anting, III, T.	安亭	Changwangchen, A.	張網鎮
Antung Ku, A, T.	安東縣	Changyen, III.	張堰
		Chaohaikia, A.	草鞋夾
Chaho, A.	岔河	Chefang, A.	車坊
Chakiakiao, A.	查家橋	Chekiao, A.	車橋
Changankiao, A.	長安橋	Chelin, A.	柘林
Changchow Ku, II, T.	常州府	Chenchang, A.	鎮場
Changchuchen, A.	張渚鎮	Chenchusze, A.	正覺寺
Changhwangkiang, A.	張黃港	Chengkiakiao, A.	程駕橋
Changking, A.	長涇	Chenglukiao, A.	鄭六橋
Changkingkiao, A.	張涇橋	Chengtunghwei, A.	正東圩
Changlientang, A.	章練塘	Chengyangkiang, A.	懲洋墟港
Changshe, A.	張舍	Chenhükiao A.	陳義橋
Changshow Ku, A.	長壽	Cheni, A.	眞茹
Changshu Ku, II, T.	常熟縣	Chenju,	眞

Chenkiatsih, A.	陳家集
Chenmu, A.	陳墓
Chenshu, A.	陳墅
Chentseh, III, T.	震澤縣
Chenwumiao, A.	眞武廟
Chetang, A.	柘塘
Chihshantu, A.	攝山渡
Chihtang, II.	支塘
Chilingmen, A.	麒麟門
Chinhong, A.	秦巷
Chinkiang, I, T.	鎭江府
Chinnantsang, A.	秦南倉
Chishuyen, A.	戚墅堰
Chowchwang, A.	周莊
Chowkiao, A.	周橋
Chowpu, III.	周浦
Chowshu, A.	周墅
Chowsinchen, A.	周新鎭
Chowtiehkiao, A.	周鐵橋
Chuchentsi, A.	竹鎭集
Chüehkiang, II.	掘港
Chuhangchen, A.	竹行鎭
Chukiakio, II.	朱家角
Chuking, II.	洙涇
Chulan, A.	褚蘭
Chumen, A.	朱門
Chunghing, II, T.	衆興
Chungku, A.	重固
Chutang, A.	祝塘
Chwangkiahang, A.	莊家行
Chwankiangchen, A.	川港鎭
Chwansha, II, T.	川沙廳
Erhkia, A.	二甲
Erhling, A.	珥陵
Fahwa, A.	法華
Fanchwan, II, T.	樊川
Fangkiaochen, A.	方橋鎭
Fangtaichen, A.	方泰鎭
Fanshui, II.	氾水
Fenghsien Ku, A.	豐縣
Fengkiao Ku, A.	楓橋
Fengking, II.	楓涇
Fengkutsun, A.	鳳谷村
Fengli, A.	豐利
Fengsien, A.	奉賢縣
Fowkiao, A.	浮橋
Fowning, II.	阜甯縣
Fowtzetsi, A.	埠子集
Fuan Ku, A.	富安

Fushan, A. T. 福山

Haian, II, T. 海安
Haichow, II, T. 海州
Haifuchen, A. 海復鎮
Haimenting, II, T. 海門廳
Hangkiao, A. 項橋
Hangkiatsi, A. 杭家集
Hantsun, A. 韓村
Hengkikiao, A. 橫溪橋
Hengking, A. 橫涇
Hengshan Ku, A. 橫扇
Hengtang, A. 橫塘
Hinghwa, II, T. 興化縣
Hocheng, A. 河城
Hokiao, A. 和橋
Hokiashih, A. 何家市
Holiehkow, A. 河埒口
Howteng, A. 后塍
Howtseh, A. 后宅
Howyangfang-tsien, A. 后楊坊前
Howyucha, A. 侯油榨
Hungkiao Ku, A. 虹橋
Hungkiao Ku N, A. 虹橋
Hunglanfow, A. 洪藍埠

Hungshengli, A. 鴻聲裡
Hupukow, A. 滸浦口
Hushu, II. 湖熟關
Hushukwan, III. 滸墅關
Hutai, A. 胡埭
Hutow Ku, III. 湖堈
Hwaianfu, II, T. 淮安府
Hwaki, A. 花溪
Hwangkiao, II. 黃橋
Hwangking, A. 黃涇
Hwangtai, A. 黃埭
Hwangtang, A. 黃塘
Hwangtu, A. 黃渡
Hwangtutang, A. 黃土塘
Hwashu, A. 華墅
Hwatafang-chwang, A. 華大房莊

Ihing, II, T. 宜興縣
Iling, A. 宜陵

Jukao, II, T. 如皐縣
Junghong, A. 榮巷

Kaishow, II. 界首
Kangkow, A. 港口
Kangmen, A. 岡門

Kanlu, A.	甘露
Kanyü, A.	贛榆
Kaokiao Ku, III.	高橋
Kaokiaomen, A.	高橋門
Kaoliuchen, A.	高流鎮
Kaoshun, II.	高淳縣
Kaotso, A.	高作
Kaotsochen, A.	高作鎮
Kaotze, A. T.	高資
Kaowang, A.	高旺
Kaoyuchow, II, T.	高郵州
Kianchen, A.	騎岸鎮
Kiangchaokiang, A.	姜灶港
Kiangnan, II, T.*	高昌廟
Kiangningchen, A.	江甯鎮
Kiangpu, A.	江浦
Kiangwan, II, T.	江灣
Kiangyen, II, T.	姜堰
Kiangyin, II, T.	江陰縣
Kiaochen, A.	橋鎮
Kiaolin, A.	橋林
Kiaoshu, A.	橋墅
Kiaotow Ku, A.	橋頭
Kiaotowchen Ku, A.	橋頭鎮
Kiatinghsien, II.	嘉定縣
Kienpi, III.	諫壁
Kienyang Ku, A.	建陽
Kikiashih, A.	季家市
Kilinchen, III.	麒麟鎮
Kingantsi, A.	敬安集
Kinsha, II.	金沙
Kintan Ku, II.	金壇縣
Kintseh, A.	金澤
Kintungkiao, A.	金童橋
Kinyüchen, A.	金餘鎮
Kiohsieh, A.	角斜
Kiulungchen, II.	久隆鎮
Kotsun, A.	葛村
Kowan, II.	口岸
Kowtengchen, A.	溝墩鎮
Kucheng Ku, A.	固城
Kulitsun, A.	古里村
Kungchen Ku, A.	孔鎮
Kunshan, II, T.	崑山縣
Kupichow, A.	古邳州
Kushan Ku, A.	顧山
Kütang, A.	曲塘
Küyung, II.	句容縣
Kwachow, A.	瓜州
Kwangfu, A.	光福

* So in latest edition of Postal Guide.

Kwanglingchen, A.	廣陵鎮
Kwanhu, A.	官湖
Kwanyinmen, A.	觀音門
Kwapu, A.	瓜埠
Kweikiachwang, A.	歸家莊
Kwochwangmiao, A.	郭莊廟
Liangtow, A.	梁塅
Lifakiao, A.	力乏橋
Likow Ku, A.	蠡口
Likwoyi, A.	利國驛
Lili, A.	黎里
Linchengtsih, A.	淩城集
Lintienchen, III.	靈甸鎮
Lintseh, A.	臨澤
Lipao, A.	李堡
Lishe, A.	禮社
Lishih, A.	蠡市
Lishui, II.	溧水縣
Litienchen, A.	李典鎮
Liuchwang Ku, A.	劉莊
Liuho Ku, II, T.	瀏河
Liuhong, A.	陸巷
Liukiao, A.	劉橋
Liyanghsien, II, T.	溧陽縣
Loshe, A.	洛社
Lotien, II.	羅店
Lowtang, A.	婁塘
Loyang Ku, A.	洛陽
Lücheng, A.	呂城
Luchih, III.	甪直
Luchukiao, A.	陸區橋
Luho, II.	六合縣
Luhochen, A.	鹿河鎮
Luhü Ku, A.	蘆墟
Lukia, A.	六甲
Lukiakiao, A.	陸家橋
Lukiapeng, A.	蓼葭浜
Lukow Ku, A.	綠口
Lulangkiao, A.	六郎橋
Lumu, A.	陸墓
Lunghwa, II.	龍華
Lungtan Ku, A. T.	龍潭
Lungtu, A.	龍都
Lüsze, A.	呂四
Luwan, A.	鹿苑
Makiatsih, A.	馬家集
Maochuchen, A.	毛竹鎮
Maokiashih, A.	毛家市

Matang Ku, A. 馬塘
Matowchen Ku, A. 碼頭鎮
Meili, A. 梅里
Meitsun Ku, A. 梅村堰
Meiyen, A. 梅堰河
Mengho, A. 孟河鎮
Miaochen, III. 廟鎮
Minhang, II. 閔行
Mocheng, A. 莫城
Molingkwan, A. 秣陵關
Mulungting, A. 牧龍亭
Mutu, II. 木瀆

Nancha, A. 南閘
Nanfangtsien, A. 南坊前
Nanhengking, A. 南橫涇
Nanhwei, II. 南匯鎮
Nankiao Ku, II. 南橋
Nankiaochen, A. 南橋鎮
Nanking, H. O., T. 南京
Nanshwangmiao, A. 南雙廟
Nansiang, II, T. 南翔
Nantang, A. 南塘
Nantsingho, III. 南清河

Owtangkiao, A. 藕塘橋

Pacheng, A. 巴城
Paihokang, A. 白鶴港
Paikü, A. 白駒
Paimao, A. 白茆
Paipu, A. 白蒲
Pancha, III. 板閘
Pankiao Ku, A. 板橋
Panpu, II, T. 板浦
Paochang, A. 包場
Paochen, II. 堡鎮
Paoshan, II. 寶山縣
Paoyen, A. 寶堰
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Papaikiao, A. 八百橋
Patan, A. 八灘
Patowshan, A. 巴斗山
Patzekiao, A. 八字橋
Patzekiao N, A. 八字橋北
Payitsi, A. 八義集
Pehchih, A. 北坎
Pehchowchwang, A. 北周莊
Pehkiao, A. 北橋
Pehkwo, A. 北漍
Pehnganfeng, A. 北安豐
Pehsinchen, II. 北新鎮

Pehsinking, A. 北新涇
Peihsien, A. 沛縣
Pengchen, A. 浜鎮
Penglangchen, A. 蓬閬鎮
Penniu, A., T. 奔牛
Picheng, A. 埤城
Pingcha, A. 枰茶
Pingkiao, A. 平橋
Pingwang, A. 平望
Pochu, A. 博渚
Puchwang, A. 浦莊
Pukow Ku, II, T. 浦口

Sankiangying, A. 三江營
Sanmaochen, A. 三茅鎮
Sanshihlipu, A. 三十里埠
Santowchen, A. 三梁鎮
Sanyangchen, II. 三陽鎮
Shakow Ku, III. 沙溝
Shangfang, A. 上坊
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Shangkang, III. 上岡
Shangsinho, II. 上新河
Shangyüanmen, A. 上元門
Shanjenkiao, A. 善人橋

Shaochi, A. 岐峭
Shaopo, II. 邵伯
Shatow Ku, II. 沙頭
Shengtzechen, A. 生祠鎮
Shenkang, A. 申港
Sheyang, A. 射陽
Shihchwang Ku, A. 石莊
Shiherhwei, II, T. 十二圩
Shiherhweikang, A. 十二圩港
Shihfowkiao, A. 石埠橋
Shihkiakiao, A. 施家橋
Shihkiang, A. 石港
Shihpai, A. 石牌
Shihtang Ku, A. 石塘
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Shingtseh, II. 盛澤
Shunhwa, A. 淳化
Shuyang, II, T. 沭陽縣
Shwangfeng, A. 雙鳳
Shwangkow Ku, A. 雙溝
Shwangtien, A. 雙甸
Siakang Ku, A. 夏港
Siamohwei, A. 蝦蟆圩
Siangcheng Ku, A. 湘城

Siangshuikow, A.	响水口
Siaochaichen, A.	小寨鎮
Siaohsien, A.	蕭縣
Siaoki Ku, A.	小紀
Siaolinwei, A.	孝陵衛
Siapa, A.	下壩
Siashukai, A.	下蜀街
Siawangshu, A.	下王墅
Sichang, A.	西漳
Siehfowchen, A.	薛埠鎮
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Sienhomen, A.	仙鶴門
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Sima, A.	嘶馬
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Sinanchen Ku, A.	新安鎮
Sinanchen Ku S, A.	新安鎮南
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Sinchenshih, A.	新鎮市
Sinchwang Ku, III, T.	莘莊
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Singtienmiao, A.	星甸廟
Sinkaiho, A.	新開河
Sinkangchen, A.	新港鎮
Sinpichow, A.	新邳州
Sinpuchen, III.	新浦
Sinta, A.	莘塔
Sinti Ku, A.	新地
Sintukiao, A.	新瀆橋
Sipa, A.	西壩
Sishan, A.	西山
Sishankiao, A.	西善橋
Sishihkiao, A.	西石橋
Sisinshih, A.	西新市
Sitangshih, A.	西塘市
Siting, A.	西亭
Sitsang, A.	西倉
Sitsinkiao, A.	西津橋
Sitwan, A.	西團
Soochow, I., T.	蘇州府
Soshu, A.	索墅
Süanpaochen, A.	宣堡鎮
Süchowfu, II, T.	徐州府
Süehyenkiao, A.	雪堰橋
Suining Ku, A.	睢甯縣
Sungkiangfu, II, T.	松江府
Süshe, A.	許舍

Süshechen, A.	徐舍鎮
Sutsien, II, T.	宿遷縣
Szekia, A.	四甲涇
Szeking, III.	泗涇頭
Szetow, A.	寺頭墩子
Szetuntze, A.	四墩子樹
Szetzeshu, A.	獅子樹縣
Szeyanghsien, A.	泗陽縣
Tachang, A.	大塲
Tahingtsih, A.	大興集
Tahokow, A.	大河口
Taichow Ku, II, T.	泰州
Taihing, II, T.	泰興縣
Taikikiao, A.	戴溪橋
Taitsang, II.	太倉州
Takang, A.	大岡
Takiang, II.	大港
Takiao, III.	大橋
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Tangkiao, A.	塘橋
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Wangyingchen, A.	王營鎮
Wantowchen, A.	灣頭鎮
Weiting, III, T.	唯亭
Woosung, II, T.	吳淞
Wukiang Ku, III.	吳江縣
Wukiashih, A.	吳家市
Wushanchen, A.	烏山鎮
Wusih, II, T.	無錫縣
Wuyu, III.	伍佑
Yangchow, II, T.	揚州府
Yangchwang Ku, A.	楊莊
Yangho, A.	洋河
Yanghwatsi, A.	佯化集
Yangkiachwang, A.	楊家庄
Yangkiatsih, A.	楊家集
Yangkingchen, A.	洋涇鎮
Yangshe, A.	楊舍
Yangshuyüan, A.	楊墅園
Yangtsien, A.	羊尖
Yangtzehsien, III.	揚子縣
Yaohwamen, A.	堯化門
Yaokiakiao, A.	姚家橋
Yaowan, II, T.	磘灣
Yencheng Ku, II.	鹽城縣
Yenkiakiao, A.	嚴家橋
Yenkiao, A.	堰橋
Yenling Ku, A.	延陵
Yilin, A.	益林
Yinhangchen, A.	殷巷鎮
Yüanchaokiang, A.	袁灶港
Yüanshan Ku, A.	元山
Yüchi, A.	玉祁
Yuehchengkiao, A.	月城橋
Yükow Ku, A.	漁溝
Yunganchen, A.	永安鎮
Yunghingtsih, A.	永興集
Yuntsun, A.	運村
Yüsi, A.	餘西
Yütung Ku, A.	餘東

ADDENDUM (*September*, 1916)

Shatowchen, A. 少頭鎮

APPENDIX V

CURRENCY, WEIGHTS AND MEASURES IN PRINCIPAL TOWNS[1]

Authority : Imp. Japanese Rys., Official Guide, vol. iv, 1915.

Nanking. The *currency* in use at Nanking comprises dollars, small silver coins, copper coins, small copper pieces (with a square hole in the middle), and bank-notes. The silver dollars are of several kinds: the Mexican dollar (popularly known as *ying-yang*), and the yüan-yin (popularly known as *lung-yang*), issued by either the Hupeh Mint or the Hunan Mint. The small silver coins (*hsiao-yang-yin-tzŭ*) comprise pieces of 20 cents (*liang-chiao*), 10 cents (*i-chiao*), and 5 cents (*pan-chiao*). The copper cent known as *t'ung-yüan*, or more popularly as *t'ung-ko-tzŭ*, is worth one-tenth of *i-chiao* (10 cents). The smaller copper cash known as *t'ung-ch'ien*, with a square hole in the middle, are old native coins (among them being found some privately coined, which, however, circulate on a par with those issued by Government mints).

Weights and Measures. The Chinese unit of long measure in use in Nanking and neighbouring regions is the *ch'ih* (foot), which is equal to 13·28 English inches. The smallest measure of capacity is the *shao* or *sho* (·0728 gill); 10 shao = 1 *ho*; 10 *ho* = 1 *shêng* or *sên*; 10 *shêng* = 1 *tou* (2·25 gals.). The weights are of two kinds: one having the *li* as its unit,—10 *li* = 1 *fên*, 10 *fên* = 1 *ch'ien*, 10 *ch'ien* = 1 *liang* (580 grs.); the other making the *chin* (or catty, $1\frac{1}{3}$ lb.) its unit,—2 *chin* making 1 *yin* and 100 *chin* = 1 *tan* (or picul = $133\frac{1}{3}$ lb.).

Shanghai. The Shanghai *currency* comprises the old Chinese copper cash, copper coins (cent pieces, minted at Soochow,

[1] See general chapter on Financial Conditions of China in Vol. I.

Hangchow, Hankow, and Canton), 10 and 20 cent silver coins (minted in Kiangnan, Hupeh, and Kuangtung), Mexican dollars (commonly called *ying-yang*), shoe-silver pieces, bank-notes of five denominations—1, 5, 10, 50, 100 dollars—issued by foreign and native banks. The rate of exchange of these different kinds of bank-notes is advertised daily in the papers.

Measures: (1) cloth measure, 1 *ch'ih* (Chinese foot) = 13·85 to 14·05 English inches; (2) shipbuilder's measure, 1 *ch'ih* = 11·55 in.; (3) tax-collector's land measure, 1 *ch'ih* = 13·18 in.; carpenter's measure, 1 *ch'ih* = 11·14 in.

Weights are far from being uniform; the common terms are *liang* (tael), *kin* or *tching* (catty), *tan* (picul), and *shih* (16 *liang* = 1 *kin*; 100 *kin* = 1 *tan*; 160 *kin* = 1 *shih*),—1 *liang* being equal to $1\frac{1}{3}$ oz.

Soochow. The Soochow *currency* comprises Mexican dollars, *lung-yang* (dollars) minted in Hupeh, Kuangtung, Kiangnan, and Chekiang; copper cents (*t'ung-ko-tzŭ*) and old copper cash (*t'ung-ti*), a thin round piece with a square hole in the middle (1 *t'ung-ko* = 10 *t'ung-ti*); paper-money—silver notes issued by the Hongkong and Shanghai Banking Corporation, Chinese Bank of Commerce (*Chung-kuo T'ung-shang Yin-hang*), and Yokohama Specie Bank.

Measures. Linear: tailor's *ch'ih* = 14 in.; carpenter's *ch'ih* = $\frac{8}{10}$ of the tailor's *ch'ih*. Capacity: several kinds of measures are in use, of which the *fêng-ho* (fong-hoh) is the standard, the others differing by a small fraction from it in the value of the *shih* (3 bushels). Weights: for most articles 1 *chin* = 16 *liang* = $1\frac{1}{3}$ lb.; but 1 *chin* of coal = 14·4 *liang* = $1\frac{1}{4}$ lb.

APPENDIX VI

NOTE ON SIGNALLING FACILITIES

VISUAL signalling is difficult in the greater part of Kiangsu owing to the flatness of the country. In the SW. corner of North Kiangsu, in the neighbourhood of Haichow and Süchowfu, there are conspicuous hills well adapted for signalling. The highest of these is Yün-t'ai Shan, about 2,000 ft., near Haichow, but the average height is 500 to 600 ft. In South Kiangsu, although isolated hills stand up above the general level, they are in most places not close enough together to allow of their being used as a chain of signalling stations. It is, however, possible in clear weather to signal from Kunshan to Changshu Ku and to Soochow, and also from Wusih to the hills near Kiangyin; while the country between Chinkiang and Nanking is hilly, and signalling would present few difficulties. But no reliance can be placed on heliographing over long distances in the climate of Kiangsu, where cloudy days are common and continuous clear weather cannot be expected at any season.

Pagodas are frequently to be found in the vicinity of walled cities, but as a rule there is no means of climbing them, and although some of the larger pagodas have a staircase, they are surmounted by a roof overhanging a narrow gallery and are not convenient as heliograph stations. There are no high, flat-topped buildings. Should signal stations be required, it would generally be necessary to erect towers for the purpose.

For short-distance signalling also the flat country is most unsuitable, since villages, farms, orchards, and clumps of trees obstruct the view in all directions. Mounted messengers would be unable to move rapidly, so that for communication reliance would have to be placed chiefly on field telegraphs and telephones, and on fast launches or motor boats.

APPENDIX VII

BIBLIOGRAPHICAL NOTE

THE following are among the books and maps which have been most frequently consulted in preparing this volume :—

(A) Official books.

Military Report on the Province of Chiang-su (South of the Yang-tzŭ), London, 1909.

Military Report on the Province of Chiang-su (North of the Yang-tzŭ), London, 1911.

Military Report on the Province of Chê-chiang, London, 1912.

Military Report on the Province of An-hui, London, N.D.

Military Report on the Province of Ho-nan, London, 1906.

Military Report on the Province of Shan-tung, London, 1905.

North China Route Book, Tientsin, 1901–12.

Military Report on the Defences of the Yang-tzŭ Region, London, 1906.

Military Report on Railways in China, London, 1913.

China Maritime Customs, Decennial Reports 1882–91, 1892–1901, 1902–1911, Shanghai.

China Maritime Customs, Returns of Trade 1884–1915, Shanghai.

China, Postal Guide, Shanghai, 1916, and *Reports on the Working of the Chinese Post Office* 1909–1915.

Diplomatic and Consular Reports, London.

The China Sea Pilot, vol. v, London, 1912.

Yangtse Kiang Pilot, London, 1914.

Handbuch der Yangtsefahrt, Reichsmarineamt, Berlin, 1911.

Commerce Reports, Daily Consular and Trade Reports, Washington.

(B) Unofficial books.

Boulger, Demetrius C., *The History of China*, London, 1898.

Charignon, A. J. H., *Les chemins de fer chinois, un programme pour leur développement*, Peking, 1914.

Du Bose, Rev. H. C., *' Beautiful Soo,' the Capital of Kiangsu*, Shanghai, 1899.

Faber, E., *Chronological Handbook of the History of China*, Shanghai, 1902.

Gandar, le P. Domin., *Le Canal Impérial, étude historique et descriptive*, Shanghai, 1894.

Havret, le P. Henri, *L'Ile de Tsong-ming*, Shanghai, 1911.

Kent, P. H., *Railway Enterprise in China*, London, 1907.

Li Ung Bing, *Outlines of Chinese History*, Shanghai, 1914.

Macgowan, J., *A History of China*, London, 1897.

Madrolle, Guides, *Chine du Sud, Java, Japon*, Paris, 1916.

Madrolle's Guide Books, *Northern China, Korea*, Paris, 1912.

Montalto de Jesus, C. A., *Historic Shanghai*, Shanghai, 1909.

Playfair, G. M. H., *The Cities and Towns of China*, Shanghai, 1910.

Richard, L., *Comprehensive Geography of the Chinese Empire*, Shanghai, 1908.
Richthofen, F. von, *China, Ergebnisse eigener Reisen*, 5 vols., Berlin, 1877–1912.
Tchang, M., *Synchronismes chinois*, Shanghai, 1905.
Williams, S. W., *The Middle Kingdom*, London, 1883.

An Official Guide to Eastern Asia, vol. iv, *China*, by the Imperial Japanese Government Railways, Tokyo, 1915.
The China Year Book, London, 1914.
Directory and Chronicle for China, Japan, &c., Hongkong, 1916.
The North China Desk Hong List, Shanghai, 1916.
China Mission Handbook for 1914, Shanghai.

Journal of the North China Branch of the Royal Asiatic Society, Shanghai.
The Geographical Journal, London.
The Far Eastern Review, Shanghai.
The National Review, Shanghai.
East of Asia, Shanghai.
Asien, Organ der Deutsch-Asiatischen Gesellschaft, Berlin.
Mitteilungen des Seminars für orientalische Sprachen, Berlin.
Petermanns Mitteilungen, Gotha.
Verhandlungen der Gesellschaft für Erdkunde, Berlin.
Bulletin de la Société de Géographie, Paris.
Le Tour du Monde, Paris.

(C) Maps.
Admiralty Charts.
War Office Map of Country between Kiangyin and Hangchow. October 1908 '.
War Office MS. Map of Southern Chiangsu in 9 sheets.
War Office Blue Print Map, entitled ' Northern Chiangsu (Southern Sheet), from Chinese Maps '.
War Office Blue Print Map, entitled ' Northern Chiangsu (Northern Sheet), from Chinese Maps '.
War Office MS. Map of ' Northern Chiang-su ' in three sheets (1908)
War Office Map ' Province of Shantung ' (1905).
War Office Map ' Province of Honan ' (1906).
War Office MS. Map of route from Loza (Grand Canal) to Wuhu (1907).
War Office Blue Print maps of ' Rivers, Lakes, and Canals of N. Kiangsu and N. Anhui. October 1911 '.
Blue Print Map of Tientsin–Pukow Railway (Southern Section).
Blue Print Map of Pukow–Sinyangchow Railway.
Karte von Tschili und Schantung (German War Office, 1907).
Richthofen : *Atlas von China.*
Bassin inférieur du Yang-tse Kiang (French War Office, 1901).
Karte von Ost-China, Nanking (German War Office, 1901).

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Handbook of China

Vol. III. Kwangtung

IOR: L/MIL/17/20/1/3

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A HANDBOOK OF CHINA PROPER

VOLUME III

KWANGTUNG

November 1919

NAVAL STAFF
INTELLIGENCE DEPARTMENT

NOTE

KWANGTUNG, the subject of this volume, is politically the most important of the southern provinces of China by reason of the proximity of the French possessions in Indo-China and Kwangchowwan, of the British colony of Hongkong, and of the Portuguese territory of Macao. It occupies practically the whole of the basin of the West River, which in China ranks next in consequence to the Yangtse as a navigable waterway.

The contents are arranged in much the same order as in the volume on Kiangsu. There are three broad sub-divisions : Section I deals with the physical and economic geography, history, peoples, foreign territories, and railways, and includes a separate chapter on the island of Hainan ; the itineraries of routes occupy the whole of Section II ; and Section III is a gazetteer of the most notable cities and towns.

The Admiralty will be glad to receive corrections and additions.

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SECTION I

CHAPTER I

GEOGRAPHICAL OUTLINES, CLIMATE, FAUNA, AND FLORA

Boundaries, Surface, Area

Kwangtung, the extreme south-east coast province of China, has irregular **boundaries.** The line dividing it from Hunan and Kiangsi on the north follows the watershed between the basins of the Yangtse and the North and East Rivers, but on the north-east the Fukien boundary, and on the west that of Kwangsi, have been drawn for reasons which are not purely geographical. There is a small portion on the south-west conterminous with French Tonkin, which is merely a political frontier.

The surface is in general mountainous with the exception of the West River delta. The greater part of the province indeed appears to consist of ridges of equally high hills of moderate height, most of which are short and cut up by a complicated net of watercourses into separate divisions. The rivers flow alternately in narrow rocky gorges which hardly leave them room to pass, and in gentle valleys where level ground sometimes extends for several miles from either bank.

When the country as a whole is viewed from the summit of any one of the innumerable hills of the province, it gives the impression of an undulating plateau much broken up by river valleys. For long distances all the hills lie between 1,500 and 2,500 ft. in height. Here and there they are higher, and in a few places their summits are 5,000 ft. at least above sea-level.

One of the most striking features of this mountain system is the general parallelism which exists between the different

ranges of which it is composed. These follow almost without exception a direction from SW. by W. to NE. by E. An examination of the river system makes this arrangement still clearer. The normal condition is for a river to follow a furrow in the land for a short distance, and then with a sharp turn to break through one of the bordering chains almost at right angles to its previous course. When it reaches the next depression it flows for a time through wide alluvial land and then once more cuts its way through one of the bordering ranges, either back to the depression in which it had previously flowed or on to the next. But although the river may thus leave any one depression, the depression itself is continued and is usually occupied by a tributary of the first-mentioned river. Ascending the tributary a low pass is found, and beyond the pass another river flowing in the opposite direction. Most of the parallel depressions are therefore broken up into separate sections, in each of which two rivers flow towards each other, and either join another larger river on its short course through part of the same depression, or failing this form one river, and at the confluence break through one of the enclosing chains.

The delta is the most important lowland area in the province. The Si Kiang or West River flows from the west, and about 80 miles from its mouth is joined by the Pak Kong or North River. The beds of the two rivers are, however, really separated from one another by sandbanks, which sometimes rise above the water as low islands. Then they branch off sharply, the Si Kiang to the SSE., and the Pak Kong to the east. At first the country through which they flow is beset with hills, which, in contrast to those in other parts of the province, are more or less isolated, and are only occasionally grouped in chains.

The rivers soon begin to divide and form an endless confusion of large and small channels. Other streams enter from the west, the north, and the south, and the whole system becomes very complicated. Amidst the alluvium deposited by these various rivers small isolated hills arise in places and give the delta the appearance of being alternately hill and

lowland. Just off the coast a row of mountainous islands, which run from WSW. to ENE., rise above the water in the same way as the hills on the mainland rise above the alluviums of the delta.

The coast ranges are mainly granitic. Between Canton and the sea some recent sandstone formations occur, and a few miles west of the city these reappear in conjunction with carboniferous shales. Along the West and North Rivers the hills are of limestone, and in the upper reaches of the North River coal measures are found.

The core of Kwangtung is comprised in the basins of the West, North, and East Rivers, whose waters join near Canton and reach the sea in two main channels through the delta : this core is flanked on the east by a large portion of the valley of the Han River, which flows past Chaochowfu into the sea near Swatow, and on the west by the valleys of some short coast streams and the Luichow peninsula.

The **area** of the mainland is over 80,000 square miles, or approximately that of Great Britain ; Hainan, which forms part of the administrative province, is 16,000 square miles ; and the whole province is therefore estimated at about 100,000 square miles.

Climate[1]

The chief meteorological data available for Kwangtung are those compiled at Canton (see Table). These are supplemented by fragmentary information scattered through the Maritime Customs Reports. To assist in throwing light on the coast climate the Hongkong data are drawn upon, and there are a few remarks on the conditions at Wuchow, which, though in Kwangsi, may be said to represent the interior of West Kwangtung ; at Swatow and at Amoy, which is over the Fukien border in the north-east ; and at Pakhoi, where the conditions in the extreme south are exemplified. The climate of Hainan is described in the chapter on that island.

[1] See also Chapter on Climate in Vol. I, *China Proper*.

Canton

Air Temperatures :—The extreme temperatures recorded in the table are 35° and 101° ; the mean temperature for the year is 73° or 23° F. higher than that of London. February is the coolest month with a mean of 58°, August the hottest with a mean temperature of 84°.

The seasons correspond generally with the period of the monsoons, the hot season from May to the end of September with the SE. ; the cool season from October to April with the NE. monsoon.

The rainfall is most abundant from March to the end of September, accompanying SE. winds. The average amount for the year is 73 inches ; the heaviest average is 11 inches for May and July, the lightest is 1 inch for November and December. The amount of precipitation is about treble that on the east coast of England, and rather less than double the quantity on the west coast. Compared with northern China it is distinctly high.

The average number of rainy days in the year is 140, which is less than we have in England, showing that the precipitation is much heavier.

On the average there are 11 days of fog, which occur almost entirely from December to March. February is the foggiest month.

Winds :—South-easterly winds set in early in April ; in May they strengthen, are accompanied by heavy rainfall, and a rise of temperature to 85° or more ; June is equally hot but drier and sultry ; in July and August frequent showers and the stronger monsoon temper the heat, which in these three months averages 83° as against 63° for the same period in London ; September is again sultry, but the nights begin to grow cool, and in October there is a decided drop in the temperature. The first steady wind of the NE. monsoon begins to blow in the early part of November, sending down the temperature and causing a sensation of bitter cold to Europeans enfeebled by the previous heat, though the average

temperature of the month is only that of tepid water. The weather of the ensuing months, with constant sunshine, a moderately cold but agreeable temperature and clear skies is most enjoyable. The average force of the wind is moderate, and as at Hongkong the direction is mostly between NE. and SE.

Ice is said to form occasionally in the neighbourhood of Canton in January, and the thermometer registered 23° in January 1893 on the river 28 miles below the city ; this is the lowest known.

Hongkong

Hongkong is subject to an excessively hot and a somewhat cool season, coinciding with the SE. and NE. monsoons. There is also a dry and a rainy season. The mean annual range of temperature is from 55° F. to 86°. February and August are the coolest and hottest months respectively. The climate for 5 months during the cool season is very good, though sudden fluctuations in the temperature in these months and the damp heat of the summer are trying to the health of Europeans.

On the southern side of the island the SE. monsoon tempers the heat in July and August, but the city being on the northern side under the peak is completely sheltered from this wind.

From November to January, in the coolest period, the temperature is often bracing ; the lowest temperature recorded for January is 32°, and in January 1893 ice formed at sea level. Sudden changes frequently take place, a day of almost tropical heat being followed by a cutting northerly wind, for when calms and variable winds prevail it is hot even in winter. NE. gales are common in spring and autumn, and are apt to last for two or three days. In March and April owing to rain and fog the damp is almost penetrating and destructive by forming mildew on articles exposed to it. From May to the beginning of August rain falls almost incessantly causing floods, which do great damage.

A comparison of the climates of Canton and Hongkong

shows that although the main features are the same there is a considerable difference in detail. As regards temperature, while the mean is the same for both places (73° F.), the range at Canton is greater, so that with the exception of a lower temperature in January, the extremes of heat are higher and of cold lower than at Hongkong. The average rainfall at Hongkong is much heavier and the number of rainy days somewhat but only slightly greater. Hongkong is a much windier place than Canton, the average wind force is double, and the number of windless days only one-fourth. There are on the average more than 3 days of fog at Hongkong for one day at Canton, and in the first fogs are frequent in April and very rare in the second.

Pakhoi

Here the mean temperature in 1915 and 1916 was 74°. The maximum temperature in 1915 was 96° and the minimum 35° ; the figures in 1916 were 93° and 42°. The rainfall varies greatly : in 1910, an exceptionally dry year, it was 55 inches ; in 1912, 71 inches ; in 1913, from May to September only, it was as much as 89·5 inches ; in 1915, 62·9 inches ; and in 1916, 99·69 inches.

Wuchow

The temperature varies from 101° to a little below 32° for a few hours in winter, when thin ice forms on shallow pools, and white frost occurs in the early morning. For six weeks, January to mid-February, the cold is made more noticeable by the northerly winds, which set in in October and continue to March.

The following are the average maximum and minimum temperatures at Wuchow ' as far as our records permit ' :

	Max.	*Min.*		*Max.*	*Min.*
January	79	34	July	96	72
February	89	40	August	101	73
March	84	39	September	96	65
April	92	50	October	94	56
May	95	61·5	November	91·5	43
June	96·5	69	December	82	40

VALUES OF METEROLOGICAL DATA FOR 10 TO 16 YEARS AT CANTON.

LAT. 23° 12′ N. LONG. 113° 17′ E.

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*	*July.*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year.*
(1) *Mean Pressure* . .	30·3	30·2	30·1	30·0	29·9	29·8	29·8	29·8	29·8	30·0	30·2	30·2	30·0
Air Temperatures.													
Mean Maximum . .	67	62	67	77	84	86	87	89	88	83	75	69	—
Mean Minimum . .	54	53	59	68	75	79	80	80	78	73	64	57	—
Mean for Month . .	59	58	64	72	79	83	83	84	82	77	68	61	73
Absolute Maximum . .	83	84	96	92	94	97	101	99	97	94	87	84	—
Absolute Minimum . .	37	35	42	45	62	64	71	69	63	56	48	41	—
Total Rainfall (*in inches*) .	1·43	3·47	7·03	8·29	10·94	9·92	11·0	9·74	5·67	3·46	1·05	1·05	73·05
No. of days of Rain . .	7	13	15	15	18	17	16	15	10	5	5	4	140
No. of days of fog . .	2·7	3·5	1·6	0·9	0·0	0·0	0·0	0·0	0·0	0·3	0·4	1·5	10·9
WIND													
No. of days from													
NE.	17	16	12	5	2	1	0	2	8	14	19	19	115
SE.	4	3	9	16	17	17	18	14	9	8	3	3	121
SW.	1	0	1	2	3	5	4	5	3	1	0	1	27
NW.	2	1	1	0	0	0	1	1	1	1	1	1	10
Calm	7	7	8	7	9	7	8	9	9	7	7	7	92
Mean Force, Beaufort Scale	2	2	2	2	2	2	2	2	2	2	2	2	2

The seasons consist of a dry and pleasant winter—December to mid-February : a chilly interval with rain preceding spring and lasting until mid-March : a gradually warmer period, with rain, which may be called spring, lasting until early May : a period of heat from May to the beginning of October, with tropical and torrential rains at intervals during May and June, and thunderstorms during mid-summer : and a gradually cooler and dry autumnal period concluding towards the end of November, during which violent thunderstorms occur. Wuchow is relatively humid in climate.

Swatow

The climate is sub-tropical, the temperature varying from 50° to 95°. The weather is dry and cool from October to December ; cold in February ; rainy and comparatively cool from March to May ; hot in July and August ; and in the latter part of August and September it is windy with occasional typhoons.

Amoy

At Amoy the mean temperature is 72°. There is much less rain, an average of 47 inches, and less than half the number of rain days of Canton and Hongkong.

The distribution of winds resembles the condition in the south, the mean intensity is the same as at Canton, but the average number of windless days is only 18.

Fauna

The fauna of Kwangtung, strictly speaking, belongs to the great Indo-China faunistic region, but it has affinities on the one hand with the rich Indo-Malayan region, and on the other with the South China region, which is almost equally rich.

The mammals are not so numerous as the birds, nor are they as well known. The marine fishes, reptiles, batrachians, and insects have been little explored.

Mammals.—The apes, monkeys, and lemurs are fairly represented. The most noteworthy are the black gibbon

(*Hylobates pileatus*, Gray), which occurs both on the mainland and in Hainan ; the Chinese rhesus monkey (*Macacus sanctijohannis*, Sw.) found also in Hongkong ; the Hainan rock monkey (*M. erythraeus*) ; and the slow-paced lemur (*Nicticelus tardigradus*, L.).

Bats are numerous. The flying fox (*Cyononycteris amplexicaudata*, Geoffroy) is found as far north as Amoy ; the smaller bats comprise the common serotine (*Serotinus serotinus*, Schriber), the pipistrelle (*Pipistrellus pipistrellus*, Daub.) the leaf-nosed bats (*Phyllorhina aurita*, Tomes, and *P. swinhoei*, Peters), and others of these genera as well as of the genus *Vespertilio*.

The larger carnivores are the tiger, which is smaller than in India, and the leopard. There are many smaller cats and civets, of which the chief are the fishing cat (*Felis viverrina*, Bennett), the clouded tiger (*F. macroscelis*, Temm.), the Chinese wild cat (*F. chinensis*), the common civet (*Viverra zibetha*, L.), the spotted civet (*Helictis moschata*, Gray), the orange tree civet (*H. subaurantiaca*, Sw.), and the gem-faced civet (*Paguma larvata*, Gray).

Otters are found in numbers in the inland waters : they are used to some extent on lines to drive fish into nets.

A mongoose (*Urva cancrivora*, Hodgson) occurs : also the mink, a yellow-throated marten (*Mustela flavigula*), the badger, the Chinese otter, and Swinhoe's otter.

The dog family is represented by a wolf, two foxes—Swinhoe's (*Vulpes hoole*, Sw.), and the South China mountain fox (*V. lineiventer*, Sw.)—the wild dog (*Cuon deccanensis*), and that peculiar little animal the raccoon-dog (*Nyctereutes procyonoides*), which ranges in East China as far north as the Amur.

A bear has been recorded from Hainan, and it is probable that there is a species of bear on the mainland.

The ungulates are not numerous : the sambur is found on the mainland and in Hainan, where also Eld's deer (*Rucervus eldi*, Günth) occurs, and both the muntjac (*Cervulus reevesi*, Ogilvy) and the small hornless river deer (*Hydropotes inermis*,

Sw.), which are armed with tusks in the male, are extremely common in the lowlying country and brush-covered hills even in thickly populated districts. A species of serow (*Nemorhaedus collasinus*, Heude) has been described from the north of Kwangtung.

There are many rodents. The principal squirrels are *Sciurus castaneoventris*, Gray, *S. griseipectus*, Gray, *S. chinensis*, Gray, and *S. maclellandi*, Horsfield. Amongst the numerous rats and mice the giant bamboo rat (*Rhizomys chinensis*, Gray), a formidable animal, is prominent. The porcupine (*Hystrix subcristata*, Sw.) ranges up to the Yangtse valley ; the Chinese hare is known only south of the Yangtse, and there is a species of hare peculiar to Hainan (*Lepus hainanus*).

An edentate, the pangolin or scaly ant-eater (*Manis dolmanni*, Sundevall), is found in Kwangtung.

The marine mammals are few—Swinhoe's fin whale (*Balaenaptera swinhoei*, Gray), the South China small finner (*Megaptera kuzira*, T. & S.), and the white porpoise (*Delphinus chinensis*, Osbeck).

Birds.—The avifauna is rich and comparatively well-known. Including emigrants, birds of passage, and winter visitors, there are hundreds of species, of which only a few can be mentioned.

Kwangtung is almost the northern limit of the parrots: two species are found, *Palaeornis lathami*, Finsch, and P. *cyanocephalus*, L. Bulbuls are numerous, as also are other perching birds, munias, mynas, tits, flycatchers, shrikes, orioles, starlings, &c. Tropical kingfishers, bee-eaters, rollers, barbets, and cuckoos are common both in the mainland and in Hainan. Amongst the game birds are the common ring-necked pheasant, the silver pheasant, the South China quail and the button quail. Tropical doves and fruit pigeons extend into the province. Eagles, hawks, and owls abound. Along the sea coast and up the rivers marine and acquatic birds are plentiful during certain seasons.

Reptiles and Batrachians.—There are many varieties of snakes, lizards, and frogs. The python is common, being

tolerated by the natives in their houses : the cobra, the white-headed snake, and the Chinese viper are the chief poisonous species. A sea snake (*Laticauda semifasciata*, T. & S.) occurs in the Kwangtung seas. Of the lizards the great gecko (*Gecko verticillatus*, Laus.) and the brightly coloured *Liolepsis bellii*, Gray, are noteworthy. A crocodile (*Crocodilus palustris*, Less.) occurs, which must not be confused with the Yangtse alligator. Turtles are common in the district—the South China terrapin, Reeves' terrapin, the common terrapin, and the Chinese mud-turtle amongst others.

Fishes.—There is a great and abundant variety of fresh-water fish, though of what are considered by Europeans as good edible kinds thé number is few : the *kim yü*, speckled and resembling a trout, can be recommended. For information on the marine fishes the *Report on the Ichthyology of the Seas of China and Japan*, by John Richardson, should be consulted.

Insects.—Kwangtung is particularly rich in insects of all kinds. Pavie's work on the insects of Yunnan may be taken as a guide to the entomology of the province (*Mission Pavie : Indo-China*, 1904).

Flora

The first impressions of the flora of this province carried away by the traveller are ranges of barren looking grassy mountains with attractive shady gorges hidden among their folds. In these little clefts a luxuriant vegetation of flowering shrubs, ground orchids, and other interesting flowers lines the rivulets in spring and summer, and clothes their marshy banks. The open slopes being more exposed are covered with a scanty clothing of coarse grass which turns yellow and gives the country its usual parched appearance during the dry NE. monsoon. Extensive thickets of bamboos often grow along the river banks and on the lower mountain spurs, and these are largely harvested by the villagers and exported for the making of coarse brown paper, plaited bamboo ropes, for house construction, and the thousand other uses to which these huge grasses are put. Besides a few patches of forest in places

where the trees have been protected by inaccessibility or by the care of private owners, nearly all the woods have disappeared from the province. The Chinese have long since cut them all for fuel and timber, or in order to destroy the cover in which tigers might lurk. They have, however, in many parts replaced them with the Chinese pine tree, a species closely resembling the Scotch pine, but of unusually quick growth. The China fir, the universal soft wood in South China, is not cultivated in the province, but comes by sea from Fukien and further north. Other trees of course, or scattered groups occur in suitable positions, and are of such variety and beauty that the tree-flora of the province is of no small interest, but it is the flowering shrubs that make the chief claim to notice. Many kinds of Azaleas for instance are common, and the well-known Gardenia forms lovely fragrant patches on the mountain sides.

The flora of China is hardly touched as yet, and although this is the best known province botanically, it is itself almost a blank in our text books. Some of what should be the most luxuriant portions of Kwangtung have never been visited by a botanist, and a rich harvest no doubt, of new and beautiful plants lies waiting the enterprising pioneer. The British Government has published in the *Additional Series of the Kew Bulletin* (n. X) a Flora of the province from which the names of species already known can be determined by means of simple keys, and which also contains a map showing what districts are still unexplored.

CHAPTER II

HISTORY OF KWANGTUNG

THE earliest records of Kwangtung in the Chou dynasty (1122–249 B. C.) are vague and uncertain. Under the name of Nan-hai ('South Sea' region) it is said to have been already subject to the Ch'u State in the reign of I Wang (894–879), and the seat of government is supposed to have been on or near the site of the later Canton. But the greater part of the province must have been covered with jungle or forest and inhabited only by savage tribes. Even as late as the Han dynasty, the district is mentioned as abounding in buffalo and elephants.

The foundation of the city of Canton is usually placed in the reign of the Chou sovereign Nan Wang (314–256 B. C.). It was then called Nan-wu, and is not likely to have been more than a small military outpost. One day, so the legend runs, five 'immortals' appeared, dressed in gay robes and riding on five rams of many colours. Each held a corn-stalk with six ears which he presented to the inhabitants, saying: 'May you dwell here in peace, and never know famine.' Then they rose into the air and vanished, but the rams were changed into stone. Hence Canton is known as the City of Rams to the present day.

It is not until the reign of the first emperor that the authentic history of Kwangtung begins. In 221 B. C. the general T'u Chü was made Governor of Nan-hai, with Shih Lu as Assistant Governor. The latter was a skilful engineer who, in order to facilitate the transport of supplies, constructed a canal 60 *li* in length, with 36 locks, in the neighbourhood of the modern Chaochowfu. A widespread revolt of the aboriginal tribes resulted in three years' fighting; finally

they routed the Chinese forces with great slaughter, and T'u Chü himself was slain. A punitive expedition was now sent out under Jên Hsiao, the new Governor, and Chao T'o, a general of great ability, who subdued the country and established Chinese rule. Colonization was resorted to on a large scale, as many as half a million settlers being brought south.

In 209, Jên Hsiao fell ill, and hearing of the revolution then proceeding in China, he advised Chao T'o to bar the road which had been used by the invading Chinese, and thus cut off all access to the new State. This prudent policy of isolation was steadfastly pursued by Chao T'o during his long period of rule. On the fall of the Ch'in dynasty, he added part of Kwangsi to his dominions and proclaimed himself Prince Wu of Nan-yüeh. In 196, when his territory stretched northwards into Hunan, he formally recognized the first emperor of the Han dynasty as his suzerain. But the import of iron goods into Nan-yüeh having been stopped through the machinations of his neighbour, the Prince of Changsha, Chao T'o assumed the title of Emperor in 182 and raided the towns on the Changsha border. The Empress Lü, who then occupied the throne, sent an expedition against him, but pestilence prevented the army from crossing the Yang-shan range. On the Empress's death hostilities ceased, leaving Chao T'o's prestige and power much enhanced. By means of skilful diplomacy, however, he was eventually persuaded to divest himself of his imperial appanages and revert to the position of a vassal prince, which he held until his death in 137.

Chao T'o's grandson Hu succeeded to the throne, and shortly after, Nan-yüeh's frontier was wantonly attacked by the Prince of Min-yüeh (Fukien province). A prompt appeal to the Central Government soon brought effective aid, and the disturbers of the peace were beaten back. A memorial presented on this occasion by the Prince of Huai-nan, protesting against interference, shows that these southern regions were still hardly considered as belonging to the Empire. The inhabitants were mostly non-Chinese, savage and

intractable, and the country to a large extent uncultivated and infested by wild beasts.

The inevitable pressure of Chinese civilization soon gave rise to fresh trouble. The reigning prince, a grandson of Hu, was a mere child, and his mother, a Chinese by birth and sympathy, was actively intriguing for the annexation of Nan-yüeh to the Empire. She was bitterly opposed in her designs by the prime minister Lü Chia, who had the support of the people at large. A small force of 2,000 men, sent from China to help the Princess Dowager in her difficult position, was already approaching Canton, when the people rose in rebellion, massacred the inmates of the palace, and placed on the throne another of Hu's grandsons, whose mother was a native woman. The 2,000 soldiers were then cut off and exterminated.

This outrage called for stern reprisals. A most elaborate campaign was planned, by which five armies, sailing down the rivers from the north and the west, were to converge on Canton. In the autumn of 112, Lu Po-tê, entitled the Wave-quelling General, and Yang P'u, the General of the Tower-boats, reached Canton by the North River, invested the city and set part of it on fire. This led to speedy capitulation, and by the winter of 111 B. C. the whole of Nan-yüeh had been subdued, even before the arrival of the other three armies. The country was formally annexed to China and divided into nine prefectures, two of which were in Hainan and three in Annam, Tonkin and Cochin China, while the four remaining prefectures corresponded to the modern districts of Canton, Watlam, Limchowfu, and Wuchow. The Governor of the Nan-hai prefecture resided at P'an-yü near Canton. Thus the independence of Nan-yüeh came to an end 93 years after the first assumption of royal power by Chao T'o.

We hear practically nothing of Kwangtung during the Eastern Han dynasty. The name Kuang-chou appears for the first time in A. D. 210, being then applied to part of Tonkin as well as Kwangtung, but three years later the Nine Provinces of Yü were revived, and thus Kuang-chou became officially

part of Ching-chou. As a matter of fact, the country had then fallen into the possession of Sun Ch'üan, king of the Wu State, which comprised all the south-eastern part of China. In 224, the name Kuang-chou was limited to the territory north of Limchowfu. When the kingdom of Wu came to an end in 280, Kwangtung passed with the rest of its dominions under the rule of the Western Chin dynasty. In 312, rebels invited Wang Chi to make himself master of Kuang-chou. There was some fighting, but in 315 the general T'ao K'an was appointed Governor and pacified the country once more.

During the troublous times that marked the close of the Eastern Chin dynasty, Canton was seized by a pirate chief named Lu Hsün. P'an-yü held out for three months, when it too succumbed and the Governor was captured. At the moment, the Court had its hands too full to do anything. Its best general, Liu Yü (afterwards the founder of the Liu Sung dynasty) was engaged in crushing a formidable rebellion in Mid-China, which gave Lu Hsün time to consolidate his position in Canton. Hoping to be recognized as a vassal prince, he forwarded tribute to the capital, together with some dumplings of a kind known as ' help to wisdom ' for his enemy Liu Yü, who had met and defeated him a few years before. The latter retorted by sending back a ' supplement to life ' potion, by way of hinting that the other had deserved death. In 406 Liu Yü was placed in supreme military command over Kwangtung province, but it was not until 410 that he was able to dispatch an army to the south. A surprise attack from the sea wrested Canton from the rebels, who retired to P'an-yü. The next year they invested the city but could not take it, and were subsequently attacked and driven away by one of Liu Yü's lieutenants. Lu Hsün then attempted a raid on Limchowfu, but the Governor of Tonkin destroyed his fleet, and Lu Hsün drowned himself.

During the next century or so there was much unrest in China ; there were occasional rebellions in Kwangtung, and Canton underwent several sieges. The first division of the

province into east and west dates from 506. Ch'ên Pa-hsien was appointed 'Viceroy of the West River' after the rebellion which he put down in 542. At the close of the Sui dynasty the disorder prevalent in the Empire spread to Kwangtung, and Hsiao Hsien ravaged the country as far south as P'an-yü. Peace was restored by the great T'ang general Li Ching.

When T'ai Tsung came to the throne in 627, he divided the Empire into ten 'circuits', of which Kwangtung was one (under the new name of Ling-nan). Under the T'ang dynasty the province enjoyed a long period of tranquillity. Untouched by the rebellion of An Lu-shan, it was less fortunate when Huang Ch'ao rose in arms and started his career of devastation. He had asked for the post of Governor of Ling-nan, but the Government could not tamely allow a great and wealthy port like Canton to pass into the hands of a rebel, and declared him an enemy of the State. Enraged at the affront, Huang Ch'ao hurried south in 879 and pushed on the siege of Canton with fury. When it fell, the Governor was ordered to sign an act of abdication in favour of Huang Ch'ao, but he exclaimed: 'You can cut off my hand, but you can't make me write that!' The brave officer was executed and the inhabitants put to the sword. The climate, however, proved deadly to Huang Ch'ao's northern troops, and he soon marched back to Central China by way of Kweilin and Hunan.

After this rebellion was crushed, and during the whole of the Five Dynasties period, Kwangtung remained in a semi-independent condition under the rule of a family surnamed Liu which was descended from a former Governor of the modern Fungchünyün on the West River. In 909, Liu Yin was accorded the title of Prince, and his brother Yen who succeeded him sent tribute to the Court of Liang. A few years later, Yen broke off relations with the reigning dynasty, and by the capture of Kochow gained possession of the greater part of the province. In 917 he styled himself Emperor of Nan-yüeh, but in the following year changed the name of his state to Nan-han (Southern Han), which it retained for more than half a century. The kingdom gradually increased in

power, until the conquest of Linchow and Kweilin brought the whole of Ling-nan under its sway. This triumph, however, was only made possible by the distracted condition of China as a whole. As soon as the first Sung emperor was firmly seated on his throne, he sent an army to attack the reigning prince, Liu Ch'ang. One by one the cities along the course of the North River were captured by the Imperialists, and when siege was laid to Canton in 971, Liu Ch'ang surrendered and his dynasty came to an end.

Another long period of prosperity now followed, though the trade of Canton appears to have been temporarily overshadowed by the rise of Chüanchowfu (Marco Polo's Zaitun) in Fukien. In 1044 the city walls were rebuilt on an extensive scale and strongly fortified. The year 1136 is notable for the fact that the province was then for the first time called Kwangtung, an abbreviation of Kuang-nan-tung-lu (eastern circuit of Kuang-nan).

The invasions which China has suffered in the course of her history have invariably come from the north or northwest, hence of all the provinces Kwangtung has generally been the last to feel their effects. Though the Mongols were already menacing the Empire before the death of Jinghiz Khan, it was only in 1277 that the tide of war reached Canton. In the previous year the boy Emperor Tuan Tsung had been proclaimed at Foochow, but he soon had to beat a hasty retreat to Kwangtung, closely pursued by the invaders. A Mongol army entered Canton without much opposition, while the Emperor found temporary refuge in one town after another. He died from the effects of exposure in 1278, and was succeeded by his brother Ping, then only eight years of age. This child was conveyed to Yai Shan, a small island not far from Sunwui in the Canton delta, which the Chinese commander hoped to render impregnable by means of submerged vessels filled with stones, while a fleet of over a thousand war-junks was moored behind this barrier in a single line. But the Mongols contrived to establish such a vigorous blockade that all means of supply and communication were

cut off, and a great naval battle ended in the total destruction of the Sung fleet. Seeing that there was no further hope, the faithful minister Lu Hsiu-fu took the young Emperor in his arms and leapt with him into the sea. Thus the Sung dynasty came to a not inglorious end.

As the Yüan dynasty in its turn began to decline, and the bonds of authority grew slacker throughout the Empire, there was a good deal of desultory fighting in Kwangtung, and the city of Canton passed several times from the hands of the loyalists into those of the rebels and vice versa. Ultimately the Ming cause prevailed, and the province quickly recovered its prosperity. A great impetus to foreign trade was given in the early years of the fifteenth century by the expeditions of the eunuch Chêng Ho to various parts of the Malay archipelago, and even as far as Ceylon and the Persian Gulf. The manufacture of porcelain was developed, and lacquer ware of high quality was made at Canton, comparing favourably with the Japanese lacquer that had hitherto been without a rival. From this time onward, Kwangtung continued to be a separate province, and the prefecture in which Canton was situated was called Kuang-chou.

In the autumn of 1449, an escaped convict named Huang Hsiao-yang, who had sharked up a motley following of robbers and pirates, sailed up the Canton estuary and closely invested the city. The government troops were defeated, and Canton, fiercely attacked with siege engines, came within an ace of capture, besides suffering terribly from famine. The leader of a relieving force from Kochow was taken prisoner, but he suffered death rather than betray the city, and the rising collapsed in 1450, when Huang Hsiao-yang was slain.

For nearly two centuries after this there is little to record, except a few petty revolts which were promptly suppressed, and some trouble with the Yiu aborigines and the Loi tribes in Hainan. In 1517, the first Portuguese traders arrived at Canton, and Macao was conceded as a Portuguese settlement in 1536. Later on, Jesuit missionaries found their way to China in increasing numbers, including the celebrated Matteo

Ricci, who resided for some years at Shiuhing on the West River, and afterwards at Shiuchow in the north of the province.

When the Manchus appeared on the scene, many features of the struggle against the Mongols were repeated. The Chinese who remained loyal to the native dynasty were gradually driven back, but the contest in the south was by no means so hopeless as in the earlier invasion, and for a time it seemed as if the Manchus, like the Chins in the eleventh century, would have to be content with the northern half of the Empire. The task of subjugating Kwangtung was entrusted to a renegade Chinese general named Li Ch'êng-tung, who succeeded in taking Canton by a surprise attack in 1646. There a prince of the royal blood called T'ang Wang had been raised to the throne a short time before, but he was overtaken by horsemen when trying to escape, and committed suicide. Meanwhile a grandson of the Emperor Wan Li, Prince Yung-ming, had been proclaimed at Shiuhing, but the pressure of the advancing foe soon compelled him to retreat into Kwangsi. In 1648, Li Ch'êng-tung went over to the Mings, a defection which prolonged the struggle for several years, as the Manchus were busy elsewhere. For a time the new Emperor was complete master of the southern and western provinces, and the fortunes of the Manchus seemed to be on the wane. But in 1651, taking advantage of the disunion and vacillating policy of the loyalists, they invaded Kwangtung and captured several important strongholds. In the following campaigns they slowly but steadily gained ground, and by 1655 were firmly established in the larger part of Kwangtung and Kwangsi. The Ming Emperor was driven away to the west, and finally strangled himself in Yünnanfu.

At the accession of K'ang Hsi, the whole of China had been pacified, but large tracts of the Empire were but nominally subject to the Manchu Government at Peking. Wu San-kuei, to whose powerful aid the establishment of the new dynasty was in no small measure due, was rewarded with an extensive domain in the west, over which he exercised almost monarchical control; Kêng Ching-chung held a somewhat similar position

in Fukien, while Shang K'o-hsi—a Chinese like the other two—was made Viceroy of the Kwang provinces. Such a state of things was too unstable to last long ; and K'ang Hsi determined to precipitate the conflict which he saw to be inevitable. In 1673 the so-called Rebellion of the Three Princes broke out. Shang K'o-hsi himself remained loyal to the throne, but was unable to restrain his son and the Governor of Canton from making common cause with Wu San-kuei and Kêng Ching-chung. In 1677 Kwangtung was invaded by the Imperialists and soon submitted. It was the weakest of the three centres of rebellion, and not much blood was shed on its soil.

During the remainder of K'ang Hsi's reign, as well as under his successors Yung Chêng and Ch'ien Lung, the general prosperity of the country is strikingly evidenced by an enormous increase of population, as shown in the census records ; on the other hand, the seeds of future trouble were sown by the shortsighted policy officially adopted towards European traders, who began to arrive in considerable numbers during the eighteenth century. The year 1720 saw the birth of the Co-hong system in Canton. It was at first an association of native merchants who combined to regulate the prices of commodities in their own interest and soon received official backing. Later on, it was a purely government organization, composed of twelve merchants who served as sole intermediaries between foreign traders and the Chinese Government. All foreigners were strictly confined to the 'factories' in Canton, no extra-territorial privileges were granted, and grievances were rife owing to the numerous and irksome restrictions imposed on trade. The Chinese, on their side, had undoubtedly a just cause of complaint in the opium-smuggling, under British and other flags, which was constantly taking place up the Canton river. Lord Napier, who was appointed Superintendent of Trade in 1834, tried to enter into direct communication with the Viceroy of Kwangtung, but without success, and the situation became still more strained in consequence.

In 1839, Commissioner Lin was sent to Canton with full powers to put an end to the opium traffic, and the British Superintendent, Captain Elliot, was obliged to deliver up an enormous quantity of the drug which was immediately destroyed. Lin went on to demand that every foreign merchant should bind himself not to engage in the opium trade under penalty of summary execution, with confiscation of ship and cargo. Captain Elliot objected, and the foreign community withdrew from Canton to Macao, and thence to the island of Hongkong, while two British frigates sailed up to Chuenpi and fought a regular engagement with a fleet of Chinese war-junks. In 1840, a British fleet and troopships were sent out to Hongkong, and the Canton river blockaded. After much fruitless negotiation, the Bogue forts were bombarded and taken, a proceeding which had to be twice repeated owing to the refusal of the Central Government to ratify the acts of its High Commissioner Ch'i-shan. In May 1841, the forts to the north of Canton were captured, and an assault on the city was impending when the Chinese sued for peace. Canton was ransomed for six million dollars, and the British withdrew, though the final peace treaty was not signed until August of the following year, after the expedition to Nanking. In this treaty no mention was made of the opium question, but Canton and four other ports were to be opened to foreign trade and residence, and Hongkong was ceded to Great Britain. The provisions relating to Canton were not observed, which led to a further military expedition in 1847. The guns of the Bogue forts had to be silenced and Canton again threatened before the Chinese would yield.

Shortly after this, the T'ai-p'ing rebellion broke out in Kwangsi. Its originator, Hung Hsiu-ch'üan, was born at Fayün, about 30 miles north of Canton, but his native province was one of the few that remained practically untouched by the rebels. Meanwhile, anti-foreign feeling was still strong at Canton, and fresh trouble arose in 1856, when the lorcha *Arrow*, flying the English flag, was boarded and its crew carried off by Chinese officials. Yeh Ming-ch'ên, the Governor,

refused an apology, and local hostilities resulted. France, having grievances of her own, joined England as an ally, and at the end of 1857 operations were begun in earnest, Canton being bombarded and taken, and Yeh exiled to Calcutta. For the next three years, while a state of war continued, Canton remained under the government of a joint commission of three foreigners and constituted a useful lever in the hands of the allies pending the conclusion of peace. The final terms included the cession of Kowloon Point, on the mainland opposite Hongkong, to the British Crown.

In 1884, when a state of reprisals existed between China and France, Kwangtung, though close to the scene of hostilities in Tonkin and Fukien, was not actually invaded, probably because the French wished to avoid the international complications which might have resulted from an interference with the foreign trade at Canton. Two years later, an opium convention was concluded between the Chinese Government and the authorities at Hongkong, which place had long been used as a convenient rendezvous by smugglers. The stipulation that similar measures should be enforced against Macao led to the first treaty between China and Portugal; for until then the presence of the Portuguese at Macao had been purely a matter of 'goodwill' on the part of the Emperor of China. In 1898, following on the occupation of Kiaochow and Port Arthur by Germany and Russia respectively, Great Britain obtained the lease of 400 square miles of land and water, including a large addition to the territory of Kowloon, while the harbour and adjoining district of Kwangchowwan on the Luichow peninsula were made over to France on similar terms.

During the last twenty years, Kwangtung has shown itself to be in many respects the most restless and progressive of all the provinces. It is well-known that Kuang Hsü's reform edicts of 1898 were chiefly inspired by two able Cantonese, K'ang Yu-wei and Liang Ch'i-ch'ao; while during the period of unrest and national aspiration which followed the Boxer outbreak, Canton was used by Sun Yat-sen and his agents as a centre of conspiracy against the Manchu Government

After the Revolution of 1911, the Cantonese again grew restive under Yüan Shih-k'ai's autocratic rule ; his suspension of Parliament and ill-advised attempt to make himself Emperor finally caused Kwangtung to declare itself independent. Other southern provinces followed suit, and the breach between the militarist party at Peking and the Republicans of the south widened rapidly until civil war on an extensive scale broke out. Since the armistice in Europe, however, fighting has practically ceased, and the differences between north and south seem in a fair way of being satisfactorily settled.

CHAPTER III

THE PEOPLE OF KWANGTUNG

Population—the Cantonese—the Hakkas—the Hoklos—Other Races—Administration—Language—Religion—Education—Diseases and Hygiene

THE various estimates of the **population** of Kwangtung are based on rough calculations only and admit of considerable discrepancies. The Minchengpu census of 1910 gave the total number of inhabitants as 27,700,000 ; the customs' estimate in the same year was as high as 32,000,000. The distribution of this large population is very unequal, the fertile river valleys and delta lands being densely peopled ; while the bare mountainous districts, which form a large proportion of the 100,000 square miles of the province, are almost deserted. Nor is its composition homogeneous, consisting as it does of three chief, and rather antagonistic, elements—the Cantonese, Hakkas, and Hoklos—with some minor groups of inferior status such as the Tankas, the Ikias or Miao-tzŭ, Yiu tribes, and Lois.

THE CANTONESE

(1) The Cantonese form more than half of the population, and occupy chiefly the centre of the province and the rich lands of the Canton delta. They call themselves Pun-ti, or natives of the soil, of which they claim to be the rightful owners; but they would be more correctly described as earliest settlers, for they are undoubtedly a Chinese people who migrated from the north at a period earlier than recorded history. Geographical conditions, and perhaps intermarriage with the aboriginal tribes whom their first invasion displaced, have modified their physical characteristics ; and they are now a smaller and slighter race than the northern Chinese, less

hardy but perhaps more intellectual. They are, however, active, industrious, and independent, and among the most prosperous commercial people in China.

The Hakkas

(2) The Hakkas, or immigrants, are later arrivals. Their ultimate origin is a matter of dispute, but it seems probable that they are a true Chinese stock ; and it is certain that they moved from Fukien (chiefly from the Ninghwa district) in the Middle Ages, and settled first at Kaying in north-east Kwangtung. From here they gradually spread throughout the province, and are now found in every part, including the island of Hainan, though their chief centres are still in the north and north-east and in the Fayünshing, Hokshan, and Sunon districts.

They are a strong, cheery race, tougher than the Cantonese, and they do most of the cultivation of the hill districts, the Cantonese as a rule having possession of the plain lands. They make excellent labourers, and did good service in the coolie corps in the Second Chinese War. There is a perpetual feud between them and the Cantonese ; and at times they have suffered severely in their rebellions. In dress they differ slightly from the Cantonese, and their women wear a peculiar cap with heavy blue fringe about 8 inches deep, and a circular hole in the top through which a knot of hair is thrust. Daily evening ablutions are the habit of both sexes. They have not practised foot-binding, and their personal ornaments differ from those of the Cantonese. Their language, which is said to be spoken by about 4,000,000 persons, is something between Mandarin and Cantonese.

The Hoklos

(3) The Hoklos, or people of Fok (Fukien), likewise come from the province of Fukien. They are chiefly found along the coasts, and particularly in the Swatow districts. Their language, which is akin to the Fukienese dialect, prevails on

the north-east coast, and is said to be spoken by about 3,000,000 persons. They are a taller race than the Hakkas or Cantonese, and are rougher and wilder in disposition.

Other Races

Of the less important elements of the population, the **Tankas** are a dark-skinned race of smaller stature, who are regarded as an inferior breed, and are not allowed to intermarry with the three superior races. It is only since the days of the republic that they have been enfranchized. Their origin is obscure, one theory being that they have sprung from parties of political refugees who came to Kwangtung in the distant past. At present they live by petty trades, and form the boat population of Canton, where they are said to number 120,000. Here they are called Tan-min, and live on boats in Pearl River. The word Tan is said to be a tribal name. In written Chinese it is represented by the character for egg (tan), and the boats of the Tan-min are known as 'egg-boats' The **Miao-tzŭ** or **Ikias** (barbarians) are one of the aboriginal tribes of China, and are said to have been pressed southwards by the invading Chinese from the Yangtse valley. Their homes are chiefly in the mountain regions of Kweichow, Kwangsi, Yunnan, and Laos (in Indo-China); but there are a few isolated settlements of them in Kwangtung, one of which is in the Limchowfu district, and another in central Hainan.

Another aboriginal race is the **Yiu** (Yao, jackal), which is located in the north-western mountains of Kwangtung, and is said to number about 30,000. The Yius are smaller in stature than the Chinese, but strong and sturdy, and capable of carrying unusually heavy burdens. They do not shave the head, but wear the hair coiled up behind. Both sexes have long hair, and dress in a very similar style, wearing a jacket with close-fitting sleeves and open neck, trousers to the knee only, a sort of leg bandage, and no boots or hat. Both sexes, too, wear large silver earrings and necklets. The Yius are chiefly found in the district round Linchow and Yüyüan.

They bring in their goods to market in the Chinese towns, but do not admit strangers to their mountain homes. They speak a language entirely different from the Chinese, and do not intermarry with the latter. The highland Yius are fierce and independent, and much feared for their vengeance, which is carried on as a vendetta from father to son.

The inhabitants of Hainan, including the **Loi** aborigines, are described in Chap. XIII; and short notes on the local characteristics of the people of the Luichow Peninsula will be found in Route 75 and in the description of Kwangchowwan (p. 125).

Administration

Under the Empire the Kwangtung Province was united with the Kwangsi Province under one Viceroy. The provincial officials consisted of a Governor, a Provincial Treasurer, a Chief Justice, a Tartar General, Intendants of Circuit, and Magistrates of various categories. The province was divided into prefectures and districts, each with its local officials, the whole forming a complete and well-organized system. Besides all these civil officials there were naval and military authorities, some more or less independent of Peking, having command of provincial forces.

When the Revolution took place (in 1911) the main features of the provincial scheme of government were retained but a number of changes were made. The division of the province into prefectures was abolished and the position of a viceroy was no longer possible under a republican form of government. The latter officials were first succeeded by military governors (*Tu-tu*; Cantonese, *Tutuk*). A Provincial Assembly also came into existence with 161 members, a president, and two vice-presidents. It was authorized to discuss all matters except those of finance and administration. The Governor had power to veto resolutions passed; such matters then went before an arbitration committee for decision.

A Generalissimo was appointed at one time and Sun Yat-sen held this appointment for a period in conjunction with a high

civil post; but he afterwards resigned both. Relations between the south and the north of China have been practically severed for a considerable time past; but the following is the provincial system of government in the Canton Province, as carried out when normal conditions prevail:

The Chief Civil Authority is the Governor, *Shêng-chang* (Cant. *Shang-chöng*) appointed by the President of the Republic. He exercises his functions through an Administrative Department, *Chêng-wu T'ing* (Cant. *Ching—mò T'ing*), the President of which is styled *T'ing-chang* (Cant. *T'ing—chöng*). There are four subdivisions of this department, as follows:

Superintendence, *Tsung-wu* (Cant. *Tsung—mò*);
Internal Affairs, *Nei-wu* (Cant. *Noi—mò*);
Education, *Chiao-yü* (Cant. *Káú—yuk*);
Industries, *Shih-yeh* (Cant. *Shat—yip*).

Financial matters are under the direction of a Provincial Department of Finance, *Ts'ai-chêng T'ing* (Cant. *Tsoi—ching T'ing*).

Local intercourse with foreigners is normally conducted by representatives of the Ministry of Foreign Affairs styled 'Special Commissioner of Foreign Affairs'.

On the judicial side there is the Chief Justice of the Higher Court. The courts of the new style are called *Shên-chien T'ing* (Cant. *Sham Kím T'ing*).

At present, in the Kwangtung Province the post of Military Governor, *Tu-chün* (Cant. *Tuk-kwan*) is combined with that of Civil Governor. As the highest military official he should act under the direct orders of the Ministry of War and the General Staff.

For administrative purposes the province is divided into six *Tao* (Cant. *Tò*). The chief official in each is the *Tao-yin* (Cant. *Tò-yan*). He is under the supervision of the Governor, but the powers of this Intendant of Circuit in his own circuit are similar to those of the Governor in the province. The Governor may authorize him to supervise the District Magistrates in his jurisdiction in connexion with the functions of

tax-collectors and judges, and this supervision is done under the direction of the Provincial Department of Finance and the Higher Court. Reports on these duties are submitted to the Governor. The Tao-yin also exercises a general supervision over the other duties of the District Magistrates. He has authority to use the militia in his jurisdiction and to apply for aid to the regular military authorities when necessary; but he must apply through the Governor except in extraordinary circumstances.

The District Magistrate, *Hsien Chih Shih* (Cant. *Yün Chí Sz*) is the chief official of a district. He also acts as judge, except in important centres, tax-collector, and police officer. A typical district consists of a walled town and surrounding country.

Language

Several dialects of the Chinese language are current in Kwangtung, the two chief being **Cantonese** and **Hakka,** both of which differ widely in sound, though little in construction, from the Mandarin dialect of Peking. Cantonese is a more ancient and purer language than Mandarin, and it is believed to be more akin than the latter to the Chinese of 3,000 years ago. It has 800 distinct syllables and 9 distinct tones. It is not practicable in this note to go into the differences in sound between Cantonese and Mandarin, but some idea of them can be readily obtained by comparing the spelling of the Cantonese names in this book with their Pekingese equivalents. It is computed that 20,000,000 people in Kwangtung use the Cantonese dialect, but their speech is not by any means uniform; and the numerous local variations which constitute sub-dialects would be hardly intelligible in Canton. Thus the Sunwui, Tungkun, and Shiuhing districts have each a distinctive *patois*, to mention only three of many.

The **Hakka** dialect is something between Mandarin and Cantonese both in sound and in antiquity. The Hakka tones are said to resemble those of the Yangtse valley on the one hand, and those of Ningpo on the other. Divergencies between

the local varieties of Hakka spoken in different parts of the province are not so marked as in the case of Cantonese ; but there are noticeable differences between the Hakka speech in the various centres, such as Kaying, Sunon, and Lokchong Hakka is said to be spoken by about 4,000,000 persons.

Of the remaining Kwangtung dialects **Hoklo** and its chief offshoot the **Swatow** dialect are spoken by several millions of the inhabitants of the coastal districts. They are both akin to Fukienese ; and the Swatow dialect prevails along the north-eastern coasts of the province for about 140 miles, spreading from 40 to 60 miles inland.

The Luichow Peninsula and the island of Hainan have local dialects of a hybrid nature containing elements of Cantonese, Hakka, and Hoklo (see Chap. XIII). The following examples of local peculiarities will serve to illustrate the difficulties to be expected by travellers in Kwangtung.

On the East River Cantonese is understood by most of the people. Little pure Hakka is spoken, the dialect being Cantonese debased with Hakka, intelligible to any one with a knowledge of the former. Hoklo-speaking communities are rare.

On the North River as far as Tsingyün little but Cantonese is talked. From Tsingyün to Yingtak Cantonese is spoken by all boat-people, merchants, &c., but away from the river Hakka is talked, though many villagers can talk Cantonese fairly well. Above Yingtak the dialect becomes more difficult to understand. On the whole Cantonese carries the traveller farther than any other language. Between Shiuchow and Ichang Hun the dialects met with are three in number, namely, Cantonese, Hakka, and Hunanese. From Shiuchow to Pingshek the country dialect is Hakka. Along the river, however, Cantonese is always spoken. From Pingshek to Ichang Hun Hunanese is generally spoken, but a few may be found who talk Cantonese. Hunanese is perfectly easy to Mandarin speakers. The Yiu dialect spoken by the aboriginal tribes who come to Pingshek to trade is entirely local, and only understood by a few Pingshek people. The country people are uneducated, few being able to read Chinese characters.

In west Kwangtung, and in Kwangsi as far north as the West River, Cantonese is spoken almost universally though other dialects exist.

In the region of the Luichow Peninsula the Luichow dialect is met. This dialect is akin to some of the Hainanese dialects (see p. 41), but resembles mostly the Hoklo dialect, i. e. that spoken from Swatow to Hoifung. Large numbers of the inhabitants, however, talk Cantonese sufficiently well for practical purposes. In Kochow it may be noted that the people pronounce 'S' and 'Sh' as 'Shkl'; thus 'Sam'—three—is pronounced 'Shklam'. This trick of speech is somewhat disconcerting till one is accustomed to it. There are other minor differences.

The country along the coast between Hongkong and Swatow presents especial difficulty as regards language. The natives of the country from Hongkong to Howmoon are Hakkas for the most part, but owing to the presence of a proportion of Cantonese natives and to the spread of the Cantonese language among the southern Hakkas, Cantonese is also widely spoken, especially in the towns. Cantonese is by no means the accepted dialect, but it becomes increasingly mixed with Hakka and even the Hoklo sounds as Howmoon is approached. A knowledge of Hakka greatly assists in the comprehension of this dialect. Away from the coasts and from the neighbourhood of large towns pure Hakka is spoken. This dialect, called the Sunon Hakka, is, however, quite different to that spoken on the North River.

From Makung onwards the Hoklo dialect is practically the only one spoken. Merchants and coolies, however, who have been to Hongkong and speak Cantonese, are frequently met with, while Hakkas from further inland come to the markets and ply various trades throughout this district. The country north of a line drawn through Hoifung, Kweitam, Kityang is mainly inhabited by Hakkas. The dialect spoken at Swabue is reported to differ widely from that spoken at Swatow, but the coolies from the former place have no difficulty whatever in their intercourse with Swatow men.

Religion

A general account of the religions of China will be found in *China*, Vol. I. The bulk of the native population of Kwangtung, as is common throughout the whole empire, recognizes a mixture of Buddhism, Taoism, and Confucianism, the last being a system of ethics rather than a cult of the supernatural. In addition, the people are addicted to a vast number of superstitious observances, grouped under the heading of *fêng-shui*, and intended to ward off evil spirits. But here, as elsewhere in China, ancestor-worship is the most real religion, and the graveyard commands more respect than the temple. Among the aboriginal tribes pure nature-worship as a rule prevails.

The Christian missions have been active in the province for many years. The chief Protestant societies are enumerated below with the districts in which they are specially active. There are, besides, numerous mission stations in Kwangtung, in all not less than sixty, many of which are noticed in the Gazetteer of Towns.

American Baptist Missionary Union.

Hainan (Hoihow, Kiungchow, Kachek, and Nodoa), the Canton districts, and Limchowfu. Several of the stations have hospitals attached.

Basel Mission.

East and Han Rivers districts (14 stations, with hospitals at Hoyün and Kaying).

Berlin Missionary Society.

Canton district and Hongkong (12 stations), Shiuchow and Namyung.

Church Missionary Society.

Pakhoi and Hongkong (3 stations), with hospital at Pakhoi.

English Presbyterian Mission.

Swatow district (4 stations).

Rhenish Missionary Society.

East River Delta (6 stations), with hospital at Tungkun.

Kiel Mission.

Head-quarters at Pakhoi, with branches at Limchowfu and Chonglok.

Wesleyan Mission.

Shiuchow, Lokchong, Lungkwai, Mongfukong, and Yingtak.

The *Roman Catholic Missions* south of the East River are under the Bishop of Hongkong; all other Roman Catholic Missions in the province are under the Bishop of Canton. They have branches in the following places:

North River and its tributaries.

Samshui, Yingtak, Lokchong, and Namyung.

East River.

Poklo, Tungkun, Hoyün, Lungmoonyün, and Kwaishin.

Han River.

Swatow, Chaochowfu, Kityang, Puning, Hopo, Chonglok, Hingninghsien, Kaying, Taipuhsien, and Fungshun.

Hainan.

Kiungchow and Tingan.

West Kwangtung.

Hokshan, Kochow, Shekshing, Luichow, Cheunglok, La-fu, Pakhoi, Lingshan, and Wei-chau Island.

East Kwangtung.

Sunon and Hoifung.

There are, besides, Christian communities in various places presided over by native catechists. The Roman Catholic communities are very much more centralized than the Protestant; and there are some villages in which all the inhabitants have embraced the Roman Catholic faith. This is nowhere the case with other sects.

Education

The subject of education is more fully dealt with in *China*, Vol. I. Since the old system based exclusively on the Chinese classics was dethroned in 1905, rapid progress has been made towards the installation of a modern scheme of education on

western lines throughout the empire. The Cantonese, for their part, as an intellectual and progressive people, were quick to adapt their old colleges and institutions to modern requirements, and to encourage the spread of western learning. The education system now adopted throughout China aims at progressive instruction from the elementary schools to the university between the ages of 7 and 24.

The first four years at the primary schools are intended to be compulsory, and every locality is called upon to provide and maintain these schools. District cities should be provided with middle and lower normal schools; and provincial capitals with higher normal schools and colleges of law, industry, and medicine. The Government universities are four in number. Schools are provided for girls as well as boys; and their number is steadily increasing, though China is still in the transition stage and the unsettled conditions which have followed the revolution of 1911 have not been favourable to scholastic progress.

Apart from Government schools there are numerous private schools started by local enterprise in the more prosperous and progressive towns; and foreign missionary societies have been active in this direction. Moreover, translations of European standard works are being more widely disseminated; and the number of students educated in America and Europe is yearly increasing. The press is another educational agent, and the number of newspapers in China is now considerable.

The list of schools and colleges in Kwangtung is already formidably large, and it is only possible to mention a few of the most important. Reference to others, particularly to missionary schools, will be found in the Gazetteer of Towns. The following Government schools were started in Canton in the first decade of the twentieth century:

1 law school; 1 school for special classes; 1 foreign language school; 1 high industrial school; 1 manual training school; 1 school for silkworm industry; 1 high normal school; 1 elementary normal school; 5 middle schools; 6 higher primary, or grammar schools; 4 grammar schools, higher

and lower ; 21 lower grammar schools ; 24 common schools for the poor.

At Namtow (Kowloon district) a Government college was opened in 1907.

At Chaochowfu there is a training college for teachers of the Waichow, Chaochowfu, and Kaying districts ; and the famous Chin-shan College has been remodelled on modern lines.

Kowkong, Shekki, and Sunwui are all noted for the excellence of their schools.

Of the many missionary schools and colleges the most important are the Canton Christian College now at Honglok, and the University for Chinese at Hongkong.

Military establishments include the Army Primary Cadet School at Whampoa and a Quick Course School temporarily established in the north-east quarter of Canton.

Disease and Hygiene

Malaria is a great scourge to Europeans and is the only disease which affects them generally. Nearly all the natives are infected in infancy, and pay little attention to an occasional attack, which does not as a rule keep them from work for more than a day at a time. Although the percentage of malaria amongst the troops in Hongkong has been greatly reduced of recent years, there can be no doubt that on service, if proper precautions are not taken, the most serious results will follow. For white troops at any time of the year mosquito nets are an absolute necessity.

Cholera has not hitherto been a serious menace in these parts, but there have been extensive epidemics in Manila, whence at any time infection might be brought to Hongkong.

Small-pox is very common amongst the Chinese. They practise a form of inoculation by inserting a small-pox scab in the nostril, and there is little doubt that they can claim with justice to have been the first to have discovered this preventive measure. The value of vaccination proper is now widely recognized.

Plague is now endemic in the province of Kwangtung, having been brought there from Yunnan. Thousands of deaths occur from this cause every year. So far only the bubonic form has appeared, the pneumonic being confined to North China. Plague is most prevalent during the hot and rainy months.

Enteric fever has been discovered to attack the Chinese, and in conjunction with dysentery renders the boiling of all water for drinking purposes absolutely imperative. It will be noticed that the Chinese eat practically no green food that is not cooked. Only Chinese born to a district can drink the river water unboiled.

Dysentery, though not common in Hongkong, is prevalent throughout China, and most Europeans on the mainland have suffered from it at one time or another.

Tubercular disease, owing to the lack of ventilation in Chinese houses, claims many victims.

Dengue fever is common in the spring and autumn, and the resultant swollen joints may cripple a man for months.

Rheumatic fever is rare notwithstanding the dampness of the climate.

Yellow fever is unknown in spite of the presence of the stogomyia.

Beri-beri is very common amongst the natives, and occasionally attacks Europeans.

Venereal disease in all its forms is common.

The Chinese suffer severely from diseases of the eye and tumours, and leprosy is not uncommon. Lepers are frequently met with in the large cities, and leper villages exist on the banks of the West River.

General Precautions

A mosquito net should always be used. The latest pattern suspended from two cross pieces is easily fixed in a tent, while for a bivouac a length of netting arranged as a tent will be found to suffice.

All water must be boiled before drinking, owing to the insanitary methods employed by the Chinese in manuring

paddy-fields. The Chinese believe that the water in certain parts, notably in Hainan, is poisonous owing to the presence of copper compounds. This has not hitherto met with any confirmation.

Uncooked vegetables or fruit should be avoided. The common belief that it is safe to eat cucumbers, tomatoes, and fruit raw after skinning is most dangerous, since the germs on the outer skin may be transferred to the pulp by the knife.

CHAPTER IV

ECONOMIC GEOGRAPHY

Agriculture: Food crops—rice—sugar—tea—fruit—vegetables—condiments. Industrial crops—mulberry—fibres—palms—bamboos—rushes—groundnuts—tobacco—indigo. Hainan.

Minerals: Coal—antimony—manganese—tin—miscellaneous. Hainan.

Manufactures: Silk—cotton—grasscloth—matting—bricks—pottery—paper—fans—fireworks—joss-sticks—tobacco.

Foreign trade: Imports and exports.

As in other parts of China the inhabitants of Kwangtung depend mainly upon the cultivation of the soil for their means of livelihood. Manufactures are of less importance although domestic industries are widespread throughout the province, and in the large towns certain articles are produced on a considerable scale either by native or European processes. The foreign trade carried on through Canton and other ports also gives employment to large numbers of people.

Agriculture

The agricultural activities of the province are controlled mainly by soil and climate. The delta of the Sikiang, which is flat, lowlying, and of alluvial formation, contains large areas of fertile soil. On the other hand, the hill country which occupies the greater part of the remainder of the province is relatively infertile except in the valleys of the numerous rivers and on the lower slopes of the hills. Elsewhere the land is often covered with a short herbaceous growth and small scattered trees.

The climate also is favourable for the intensive cultivation of the soil. The hot summers, mild winters, and abundant monsoonal rainfall make it possible, with the aid of irrigation,

to obtain two and sometimes three crops a year off the land. In the delta especially irrigation can be carried out on an extensive scale.

The fertility of the soil has naturally led to the growth of a dense population in the lowlands, and this in turn has reacted upon the agricultural methods of the community. As population increased it became necessary not only to cultivate every available inch of the soil in order to ensure a sufficient supply of food but to cultivate it in such a way as to obtain the maximum output from it. In order to do this the inhabitants have found it necessary to till the land with the greatest care, to devise an extensive and valuable if somewhat primitive system of irrigation, and to make full use of all the waste products of a densely populated region. One illustration will suffice to indicate the amount of labour involved in, and the results obtained from, such a method of cultivation. In certain districts when the second rice crop of the year has been collected the land is thrown into high ridges and planted with ginger or vegetables, but has again to be levelled for the first rice crop of the following year. The labour has as a rule to be performed by hand, but the return is large and it has been estimated that the holdings of the better class of farmers averaging from one and two-thirds to two and a half acres will maintain families ranging from six to twelve persons.

Food crops as a rule occupy the first place in the estimation of the Kwangtung farmer. Of these rice is the most important; sugar and tea are also grown but both have had a somewhat varied history; fruits such as oranges and bananas are plentiful, and vegetables of all kinds are abundant. The chief industrial plants include the mulberry, upon which the silk production of the province is based; ramie, hemp, and pineapple, which are valued for the fibres they yield; the palm, bamboo, and rush, which serve a multitude of purposes; cassia, cassia buds, garlic, and ginger used as condiments; ground-nuts grown mainly for the oil they contain; tobacco and indigo.



IRRIGATION WHEEL
Yüyüan district



BULLOCK CART ON ROAD

Food Crops

Rice. In the lowlands rice is usually grown under irrigation. The seeds are sown in small nurseries and the young seedlings are left there until they are about eight inches in height. They are then planted out in fields which have been specially prepared for their reception, often by sowing a crop of clover which is utilized as green manure. In this way more than a month is saved for maturing and harvesting winter and early spring crops grown on the same ground, the labour required in weeding and caring for the young plants is reduced, and the average yield is increased as only healthy plants need be transplanted. Two crops a year are often obtained, one in June, the other in October, and the latter is frequently the heavier of the two. In the hill country, where upland rice is grown without irrigation, the yield per acre is much less. The processes of harvesting and threshing the rice crop are carefully carried out, but usually in a laborious and primitive manner.

Notwithstanding the large production of rice within the province it is insufficient to meet the needs of the population, and considerable quantities have to be imported from abroad. Within recent years, also, part of the land formerly under rice has been devoted to fruits, ground-nuts, and other crops which pay better and require less labour.

Sugar. The cultivation of sugar is in the main confined to districts lying in the vicinity of the coast and to the lowlands in the basin of the North River. In some parts of the province, as for example in the country round Swatow, the product is said to be deteriorating owing to want of care in the selection of plants. The methods followed in crushing the cane are of the most primitive description, and sometimes the apparatus merely consists of two upright stone rollers fitted into a frame and turned by a buffalo or some other animal. Modern machinery, which would of course give a much better result, is beyond the means and capacity of the peasant cultivator.

Tea. The production of tea was formerly a much more important industry in Kwangtung than it is at the present time, and throughout the province there are considerable areas of terraced land which have fallen out of cultivation. It is still grown abundantly, however, in the higher regions of the North and West Rivers, and in the former area at least there appears to have been a slight increase in the cultivated area within the last few years. The product, although poor in quality, finds a ready market in Hongkong and the Straits Settlements.

Fruit. Oranges are mainly grown in the districts round Swatow and Kongmoon and in the valley of the North River. Several varieties are cultivated. The coolie-orange is the best known and in the district of Kongmoon is the most highly esteemed of all fruits. The peel of another variety, the coolie-mandarin orange, is extensively used in native medicine. Bananas and pineapples are grown in the lower parts of the delta and to a less extent elsewhere. Other well-known fruits include lichees, dates, melons, and mangoes.

Vegetables. The cultivation of vegetables is an important industry in all parts of the province. In some cases they are grown as a winter crop in the rice-fields, in others they are raised in market gardens specially devoted to their cultivation. Sweet potatoes, beans, leeks, lettuce, cabbage, and yams are among the most common.

Condiments. Cassia is the aromatic bark derived from *Cinnamomum cassia* and is often called Chinese cinnamon. Both the bark, which is known as *Cassia lignea*, and the volatile oil which it contains, are used for flavouring liqueurs and chocolate and in cooking generally. The chief region of production lies in the west of the province on the borders of Kwangsi and Kwangtung. Cassia buds are the immature fruits of the cassia tree ; they have a pleasing cinnamon flavour and are used as a spice and in confectionery.

A variety of ginger is obtained from *Alpinia galangas* which is grown extensively in Kwangtung, more especially in the neighbourhood of Canton and in some parts of the hill country. It is frequently used as a native medicine.

Industrial Crops

Mulberry. The cultivation of mulberry trees is carried on mainly in the delta, more especially in the west, where they are often found on land too high for rice. They are grown in rows about four feet apart, and owing to the way in which they are pruned have the habit of shrubs rather than of trees. Two crops of leaves for the rearing of the silk-worm are obtained each year, the first in the late spring, the second in the autumn. Owing to the importance of the silk industry much labour is expended on the mulberry tree and it is carefully pruned, watered, and fertilized.

Fibres. Ramie (*Boehmeria nivea*) is extensively grown in the country to the west of Kongmoon but it is often found in the less fertile parts of the province as, for example, on the plateaux north of Kityang. There are three annual crops. The first and best is in June when the plant is about six feet in height, the second in November is shorter, and the third in February is practically worthless. After the fibre has been bleached it is sent to the looms, where it is made into grass-cloth, fishing-nets, and other articles.

Hemp is likewise grown in the country to the west of Kongmoon and near Kityang but it is also found in the basin of the North River and elsewhere. The plant sometimes reaches a height of ten feet and the fibre is used in the manufacture of twine, thread, &c.

The cultivation of the pine-apple partly for the sake of its fibre has recently been introduced into the district of Kityang, where it appears to have proved a success.

A variety of mulberry (*Broussonetia papyrifera*) is grown in various parts of the province and is used in the manufacture of Chinese paper.

Palms. The fan-leaved palm (*Livistonia chinensis*) grows in the Kongmoon region. The trees are raised from seeds and at the end of seven or eight years the leaves are cut. The cultivation of the palm, and the industry of fan-making derived therefrom, gives employment to a large number of people in this region.

Bamboos. The bamboo, of which there are many varieties in China, is found either wild or under cultivation. Along the West River it covers considerable areas but it also grows in various other parts of the province and is a common object in the vicinity of many Chinese villages. The uses to which it is put are almost innumerable and without it the Chinese would be seriously impoverished.

Rushes. In the vicinity of the rivers, especially near Canton and Samshui, a rush (*Arundo mitis*) is grown in large quantities and is used in the manufacture of the packing-bags and matting in which rice and other commodities are exported.

Groundnuts. These are cultivated mainly for the oil which they contain. As they do not require a fertile soil and the cost of production is low they form an important crop in some of the poorer parts of the province. At the present time they cover considerable areas to the north of the Luichow peninsula, along the coast to the north-east and south-east of Swatow, in the valley of the North River, and elsewhere.

Tobacco is grown south of Shiuhingfu and in the district round Kaying but is of very inferior quality.

Indigo was formerly a crop of considerable importance, but with the development of synthetic dyes in Europe the demand for it has greatly decreased within recent years.

Hainan

The island of Hainan contains considerable areas of fertile soil, and rice, silk, sugar-cane, coco-nuts, tobacco, galangal, and various fruits and vegetables are grown. Local supplies of rice, however, are insufficient for the needs of the population and considerable quantities have to be imported. Domestic silk is used for the manufacture of piece-goods and wild silk for making fishing lines, most of which are exported to Japan. Fresh coco-nuts are sent to Kongmoon and coco-nut oil and copra to Sourabaya. Within recent years the cultivation of cotton, coffee, hemp, and rubber has been started in the island but comparatively little progress has as yet been made.

Minerals

Kwangtung has long had the reputation of being rich in minerals but notwithstanding various attempts little progress has so far been made with their exploitation. Foreign enterprise has been discouraged and Chinese companies have suffered alike from lack of funds and want of technical skill. The surface of the land has been scratched in many places, but as soon as real difficulties, such as the presence of water or the want of ventilation, were encountered the workings were abandoned. Even the increased demand for certain minerals created by the war has had little effect, as many native companies formed to meet that demand have already collapsed. Until the resources of the province have been systematically investigated by experts, and until technical knowledge is available for their exploitation, it is unlikely that the present output will be materially increased.

Among the minerals said to exist in Kwangtung are coal, iron, antimony, wolfram, manganese, tin, cinnabar, and gold. Their distribution, however, is still very imperfectly known.

Coal has been located in various parts of the province. In 1897 a mine was opened at Shihtowfu, about 50 miles east of Pakhoi, but, as the coal obtained from it was of too poor a quality to pay, the workings were closed down in 1903. About 1906 attempts made to exploit the coal deposits at Pakchukshan in the Sunning district were also unsuccessful. In 1910 an anthracite mine was opened at Lingshan in the Tsingyün district and work was restarted at Tatzewah where some previous attempts had been made. Good steam coal is said to have been found on the North River, but not in such quantities as to make it profitable to lay down a large plant. In the east of the province some deposits at Meihsien have recently been opened up, while in the west the Yueh Feng Company have acquired concessions at Nientzuping about 15 miles from Yamchow but do not appear to have done anything.

Antimony. Antimony oxide is found mainly in the north of the province in the basin of the North River, where it usually occurs in the alluvial state and is dug up by coolies from the rice-fields and valleys between the limestone hills. Shinchow is the chief collecting centre. Antimony sulphide (stibnite) also occurs in the basin of the North River, but as it requires to be blasted it is only worked to a slight extent owing to the manufacture or importation of explosives being discouraged by the provincial authorities. The best mine, which is near Shiuchow, at one time produced 70 per cent. of the antimony output of the province. Of the various refining works which sprang up during the recent boom, that at Shiuchow is the only one of note still in operation.

Manganese. Deposits of manganese have been discovered near Nata in the Pakiowan district and have been worked to some extent by the Yü Ch'in Mining Company. The ore is said to be abundant but to contain a rather high percentage of phosphorus which considerably detracts from its value. Several shipments were made to the Hanyang Ironworks and to Japan, but in 1916 the mines had to be shut down pending the settlement of a controversy between the Taoyin of Yamchow and the company as to the payment of a royalty.

Tin. The chief deposits of tin at present worked are at Kityang where the Yüan I Tin Mine Company began operations in 1914. Ore of good quality is extracted. Tin is also said to be abundant in the Yingtak district on the North River.

Miscellaneous. Other minerals are, at least at present, of less importance. Iron ore is mined at Kongku near Shiuhing; it also occurs on the surface of the ground near Yamchow. Small quantities of gold are found at Cheunglin in the Kaikin district, in the sands of the Limchow River, and elsewhere. Copper, zinc, and lead are said to be abundant in the Yingtak district on the North River. Pearls are obtained off the coast between Pakhoi and the Luichow peninsula.

Hainan

The island of Hainan is reported to be rich in tin, silver, gold, copper, and lead, but very little is known about the extent of its resources. One tin-mine is being exploited near Natai in the district of Tanchow, but owing to lack of capital and difficulties of transportation as well as to the primitive methods employed, the venture has not hitherto proved a success. Magnetic iron ore of an inferior quality has been discovered at Shekkuling in the Tsingmai district.

Manufactures

Kwangtung is one of the most important manufacturing regions in China. The natural resources of the province, its position on the great trade-routes leading from the west and north to the coast, and its dense and hard-working population have all contributed to its industrial growth. The manufactures in which it is engaged are varied, but are in the main connected with working up the agricultural and other products of the region either for home consumption or for export abroad. In some cases modern machinery has been introduced for this purpose, but in many others the old primitive methods still prevail. Regarding the output little statistical information is available. The goods exported through Canton and other ports include much that comes from other parts of China, while of those which are consumed within the province itself no record is kept. Textile pursuits, however, are of most importance and the manufacture of silk, cotton goods, grass cloth, and other fabrics gives employment to large numbers of people.

The reeling of raw **silk** is the most important branch of the silk industry in Kwangtung, and it is said that there are no less than 180 filatures in the province. Of these the greater number are worked by hand, but within recent years steam filatures have been established in or near Canton, Kongmoon, Samshui, and elsewhere. The bulk of the raw silk now exported from Kwangtung has been reeled in the

latter establishments. Piece-goods are woven in and around Canton chiefly, if not entirely, in native workshops.

The manufacture of **cotton** goods, mainly with yarn imported from India, is an industry of growing importance in Kwangtung. Previous to the war there were a number of weaving-sheds, some with hand-looms and others with power-looms, in different parts of the province. Chaochowfu and Kayingchow were noted centres for the hand-loom weaving of coloured cotton cloth, and Swatow turned out a cheap and durable fancy cloth on hand-looms imported from Japan. The Canton Knitting Company used power-looms for the manufacture of socks and underwear, and at Tinghai, Kongmoon, and elsewhere steam power had also been introduced. In some cases, however, the goods produced on power-looms were inferior to those from the hand-looms. Since the outbreak of war the high price of imported cotton fabrics has given a great impetus to the native industry and a number of new businesses have been started. At Canton, for example, factories for weaving cloth, socks, and singlets have been established and are reported to be doing well. Again, in the country round Swatow more than 100 new weaving-sheds have begun operations and the output of nankeen is already considerable.

Other textile products of the province include **grass cloth** which is woven in large quantities at Swatow, **straw matting** of beautiful design which is produced at Lintan from rushes and the yellow hemp from Kwangchowwan, coarse matting and gunny bags which are made in Canton and the surrounding districts, and a variety of other articles of somewhat similar character.

Another group of industries of considerable importance in Kwangtung includes **brick-making** and **pottery.** There are cement and brick works at Canton where the Imperial Brick and Cement Works obtains its clay from Whampoa and excellent sand from the bed of the river in the immediate vicinity of the works. This factory is said to have a capacity of 40,000 bricks per day. At Kongmoon good lime is made

from oyster-shells found in the river. Pottery is manufactured at various places in the vicinity of Swatow, but the most important works in the province are probably those at Yamchow to the north-west of Pakhoi. The clay obtained there is capable of a fine glaze and the product is said to be always tasteful and elegant.

Canton and Swatow are the principal centres of **paper-making,** though the industry is also carried on in various other parts of the province. Coarse brown paper is made from the bamboo while finer kinds are manufactured from *Broussonetia papyrifera.* Considerable quantities are exported to Hongkong and various parts of south-eastern Asia.

Among other articles manufactured in the province, all more or less on a considerable scale, are fans, fire-works, joss-sticks, tobacco, glass bangles and lamp-shades. **Fans** are made mainly from the leaves of *Livistonia Chinensis* which is grown in large quantities in the country around Kongmoon; **fire-works** are manufactured at Canton, at and in the vicinity of Samshui and Swatow, and elsewhere. Swatow, Canton, Lappa, and Kongmoon produce large quantities of **joss-sticks. Tobacco** is prepared at Swatow, Canton and Kongmoon. Canton makes glass bangles, lamp-shades, &c.

Foreign Trade

The foreign trade of Kwangtung is carried on mainly at the ports of the delta—Canton, Kowloon, Lappa, Kongmoon, and Samshui—and at Swatow and Pakhoi. It ought to be noted, however, that these ports serve an area much wider than that of the province and that the statistics of their imports and exports throw little light upon the trade of the province.

Among the chief **imports** from abroad are cotton yarn and cotton goods, mineral products, fish, rice, tobacco, sugar, and oil. Cotton yarn is imported mainly from India but an increasing quantity is coming from Japan. Piece-goods before the outbreak of war were largely of British origin but since then the Japanese have succeeded in obtaining a much larger share of the trade in certain commodities. Metals and

machinery are imported from Great Britain, the United States, and Japan, and here again the Japanese have increased their trade in a marked degree during the war. Rice is obtained in large quantities from Indo-China and fish from Japan. Sugar is sent to Kwangtung by Japan, Java, and the Philippine Islands. Tobacco is imported mainly from the United States. The imports of kerosene oil have increased rapidly within recent years; the bulk of it comes from the United States, Sumatra, and Borneo.

Chinese goods imported into Kwangtung include nankeens, beans, rice, wheat, and groundnuts.

Among the **exports** silk holds the first place. Large quantities of raw silk are exported to Hongkong for re-export to France and to the United States. Piece-goods mainly go in the first instance to Hongkong and pongees to Great Britain, the United States, and Australia. Paper is sent to various parts of eastern and south-eastern Asia, tea to Russia, the United States, and Great Britain, fire-works and joss-sticks to various countries in which Chinese are numerous.

CHAPTER V

SUPPLIES, TRANSPORT, AND ACCOMMODATION

General Observations

Except in the more mountainous portions in the north, Kwangtung may be said to be a prosperous province, and supplies are plentiful. The mountainous regions are potentially wealthy, containing valuable mineral deposits, but are as yet practically undeveloped. In the east and south-west the province is almost entirely agricultural. In the centre, i. e. the West River or Canton delta region, besides agriculture many industries are carried on. The Delta, although at first sight particularly fertile and prosperous looking, is subject to sudden floods which bring down the average of profit from farming considerably.

Timber is plentiful on the northern boundary regions. Fuel and water are available everywhere : water, when not from rivers, is generally obtained from wells. Ponies are scarce. Buffalo and oxen are the only draught animals, and their use is in most places confined to farm labour.

For transport, reliance is chiefly placed on boats. The chief form of land transport is porterage. In the south-west and in a few isolated districts elsewhere the wheelbarrow is used.

Housing is primitive and, though somewhat dirty, houses and temples are generally available for temporary accommodation.

Note.—Application for help to collect either supplies or transport should in the first instance be made to the local officials—in the case of cities to the Prefect or district magistrate ; in the case of large villages to the local military or police official, if one exists ; in all other cases to the village headman (*Tei-pou*).

At a treaty port arrangements should be made through the British Consul.

It is likely, however, that under some circumstances little or no assistance is to be had from the local officials. In such cases it will be necessary to secure supplies and transport without official help, either by force or by persuading the local producers to deal direct for ready money.

Supplies

Forage.—Owing to the nature of the country, horses are rarely used in Kwangtung. Little attention, therefore, is paid to the cultivation of millet, maize, &c. Most horses and mules will eat rice, straw and paddy, and all will eat bamboo leaves readily. Many horses will also eat the leaves of the screw pine or wild pineapple. Grazing ground can always be found in the vicinity of graves.

Rations.—**Rice** is the staple food of the country, and can be procured generally at all markets in moderate quantities. To supplement locally grown rice, a slightly inferior quality is imported from the Yangtze valley, and from Bangkok and Saigon. It is estimated that in ordinary times there would be about 15,000,000 lb. of rice in Canton, and 6,000,000 lb. within a radius of 10 miles from the city.

Flour of any kind, other than rice flour, would have to be imported; the quantity at any time in the province is very small, and is procurable as a rule only in the treaty ports. Even rice flour would have to be ground for the troops, as the Chinese do not commonly use it in this form.

Beans may be obtained as a substitute for dal.

Ghi cannot be obtained, but an oil extracted from ground nuts is a good substitute, and is always procurable.

Sweet potatoes are obtainable in larger quantities than any other vegetable.

Lard is commonly used for cooking; the Chinese variety is not very savoury, but is quite fit for use.

Tea is grown in the province, and can always be obtained, but Chinese tea is not appreciated by troops, and its issue in Hongkong has been stopped in consequence.

Sugar, brown and white, and coarse **salt** are always procurable in market towns. Salt is evaporated in large quantities along the coast.

The following **relishes** are obtainable : black pepper, dried chillies, turmeric, ginger, vinegar, and soy.

Milk is not obtainable ; the Chinese do not drink it, and so do not keep cows for dairy purposes. Tinned milk is on sale in all towns of any size, but not in large quantities. It is often of inferior quality.

Meat is generally obtainable. Pork and goat meat are abundant, and are the staple kinds of meat procurable in the province. Beef may also be had in limited quantities where a European community has created a demand for it. Water buffaloes are numerous, but their flesh is hard and tasteless. Hainan in particular is noted for its cattle. In the eastern portion of the province on the plains between Lukfung and Lengkang, small Indian bullocks are used for ploughing and transport work. Sheep are not bred in Kwangtung, but mutton in small quantities is procurable from Shanghai.

Poultry and eggs are always plentiful.

In winter the markets are well supplied with **game,** including venison, snipe, duck, pheasant, partridge, &c.

Fish, mostly carp and perch, abound in all rivers, and the inhabitants of the coast rely mainly on fishing for a livelihood. Dried fish can always be procured inland, but it is not a palatable article of food for Europeans.

Water. Kwangtung is well supplied with streams, but all water must be boiled and filtered before drinking, as it is tainted by the paddy fields, which as a rule extend nearly to the sources of the streams. In addition, most villages have wells, but the water from these is as a rule most unwholesome.

For water-supply at Canton see p. 558.

Prices. The following list shows the average prices ruling in Canton and on the Kwangtung coast in 1910 :—

Rice	4 to 7 cents per lb.
Bread	10 ,,
Flour	8 to 10 ,,
Vegetables . . .	3 to 4 ,,
Fish	20 ,,
Beef	14 ,,
Pork	17 ,,
Chickens	20 cents each
Eggs	16 cents a dozen
Coal	$9.00 to $12.00 per ton
Kerosene oil . . .	$2.65 a case (2 tins)
Vegetable oil . . .	20 cents a catty (1⅓ lb.)
Firewood. . . .	$1.00 per picul (133⅓ lb.)
Charcoal	20 to 30 cents per catty.

Coal. Though coal exists (see p. 55), it is little worked. All coal needed has therefore to be imported.

It is estimated that there are about 15,000 tons of coal always on hand in Canton, stored approximately as follows :

Shek-wai-tong, 6,000 tons ; could be loaded into shallow draught boats at the railway wharf.

Fa-ti, 300 to 400 tons ; could only be loaded with lighters.

Coal shops along the Back Reach, 200 to 300 tons in each shop ; could only be loaded by lighters.

Government Wharf, 1,000 to 1,500 tons ; could be loaded into small boats alongside the wharf ; large ships would have to be supplied by lighters.

There is also coal in varying amounts stored at different places in the city.

There are generally 3,000 to 6,000 tons available at Swatow.

Timber and firewood. Firewood is extremely plentiful, and large quantities are brought down all the principal rivers. Many varieties of pine exist, all of which make excellent fuel. Charcoal is obtainable in the towns and large villages, but not in any great quantity.

Kerosene is obtainable in market towns in moderate quantities.

Granaries and Mills. There are small public granaries in most of the principal towns, containing from 1,000 to 3,000 piculs (60 to 180 tons) of grain.

Every village and clan also has its granary, and large stocks are usually kept. There are no mills in the interior. The rice is ground between two stones by manual labour, and crushed by hammer-headed crushers worked by foot.

There are about fifty very large rice godowns on a small island due west of the Shameen. They are double two-storied buildings, and cover 100 yds. by 150 yds. of ground, but some appear to be used for other purposes such as a store for sacks ; in 1912 some were empty and none appeared to be more than half full.

There are flour-mills at Canton and Swatow.

Building Materials. Excellent granite, pink and grey, is quarried in Kwangtung, the grey being the better of the two. Owing to the difficulty of transport, it is not much used by the Chinese.

Clay for brick or tile making is abundant in the region of the Delta. The bricks are usually rather soft and inferior, crumbling rapidly under the influence of the weather.

Excellent cement is made at Macao and Canton (see p. 559), and much is imported from Tonkin.

The province is rich in timber ; the water pine and bamboo are the most generally used for building purposes ; the supply of both is practically inexhaustible. Bamboo is used for an infinity of purposes, but principally perhaps as a framework for the matsheds, which serve as shelter for so many Chinese of the poorer class.

Labour. Food being cheap in Kwangtung labour is also cheap, but the rate of wages is increasing year by year.

Coolies are to be hired in all large towns. If a large number are required, the usual practice is to hire them through a contractor, the rate being about 45 cents a coolie *per diem.* They should be organized in gangs of about 100, under

a British foreman who understands the direction of native labour. Hakka coolies have been found to be far more reliable than Cantonese. A traveller hiring his own coolies would probably have to pay from 60 to 80 cents a head a day. In the Hakka districts women are employed in large numbers.

Skilled workmen, such as carpenters, mechanics, masons, &c., are to be found in all towns, and there are numbers of men in Canton and Hongkong who are capable of looking after and working the machinery of launches and small steamers. The numerous launches which ply about Canton are built and worked entirely by native labour.

Mechanics are always to be found in Canton. The Chinese are steady, but slow workers, and can generally be relied on to carry out work given to them. A Chinese contractor will always carry out an agreement for the price originally fixed, though the standard of commercial morality is not as high as formerly.

Transport

Wheeled vehicles. Wheeled vehicles are little used in Kwangtung, as the roads are generally speaking unsuited for them. In East Kwangtung on the plains between Lukfung and Lengkang, bullock carts are met with. These are of 7 ft. track with primitive untyred wheels, and of a capacity of about 800 lb.

In the Pakhoi district a similar type of two-wheeled cart is used. They are drawn by one bullock or two in tandem, and are generally in use along the road from Pakhoi to Limchowfu, and from Limchowfu to Shekshing. From there onwards they are only used for local farm work. The carts consist of a bare framework and carry 650 to 800 lb. The rough dimensions are as follows : Wheel, 5 ft. 6 in. diameter. Bottom of axletree from ground 2 ft. Track 5 ft. 9 in. Area of body of cart 4 ft. 6 in. broad by 5 ft. long. Shafts 15 to 16 ft. long measured from back of cart where shaft commences. The axletree and wheels are a fixture like the driving wheels of an engine. The axle is formed by two



WHEELBARROWS
Ngotow district



BULLOCK CART ON ROAD

stout pegs fore and aft of the axletree, driven into the cart body allowing the axletree to turn freely and rendering the body capable of lateral movement along the axletree. This movement is limited by bamboo bands. This arrangement allows for the roughness of the roads wherein ruts 1 ft. 6 in. deep are often seen. A cart in motion makes a noise that can be heard for miles.

Pack animals. Ponies are scarcely used at all in Kwangtung. They are bred and are procurable in fairly large numbers in the western part of Kwangsi province; but if they were used in Kwangtung the provision of forage would be a difficulty.

Wheelbarrows. Wheelbarrows are occasionally met with in all parts of the province, but are most extensively used in the south-west. The following are the approximate dimensions of the wheelbarrows used in West Kwangtung, where they are most frequently met with; wheel (planks of wood kept together by two transverse pieces) 2 ft. 6 in. in diameter; body, breadth near wheel 1 ft. 3 in., near man 1 ft. 6 in., length 2 ft.; total length of barrow (axle to handle) 12 ft. The handles are supported by a plaited bamboo rope, passing over the shoulders of the man pushing the barrow. Two or more men may assist by towing on a rope secured near the axle. One man will push about 200 lb. 25 miles a day, working from about 7 a.m. until 5 p.m.

Wheelbarrows might be employed for the transport of mountain guns, where mules are not available. One barrow fitted to take packsaddles complete would take the place of one mule. The loaded pack-saddle could be transferred to a pony or mule as occasion offered. Three coolies would be required, one in the shafts and two pulling.

There is no particular reason why wheelbarrows should not be used all over the province generally, provided men accustomed to them can be found.

Coolies. Practically all land transport is done by coolies. On level ground a coolie will carry 75 catties (100 lb.), but in hill country the load should be reduced to 45 catties (60 lb.).

As a general rule it may be reckoned that a coolie with a load of 60 catties (80 lb.) will cover at least 14 miles a day, while on the plains in the eastern part of the province, up to 30 miles a day can be accomplished. The load should be divided into two portions, which are slung at each end of a carrying pole. The pace is about 3 miles an hour, with a rest of from 10 to 15 minutes every hour. 10 cents per catty ($1\frac{1}{3}$ lb.) per day is the usual rate.

The transport of guns by coolies for other than short distances is attended with so much difficulty as to render it impracticable. On the narrow paths the tendency of the coolies is to straggle out over a long distance, with the result that the various component parts of the gun might be found to be widely separated at a critical moment. Experiments have been made in this direction in Hongkong, but without any satifactory results.

Boats. Except in the parts of Kwangtung which are served by railways, practically all the passenger traffic is water-borne. On the larger rivers it is carried for the most part by steam launches towing passenger junks. These latter have two decks and a large wooden poop, where the crew and the better class passengers have accommodation. They are well-built boats with three, and in some cases four, water-tight bulkheads; and, though varying in size, they are generally about 80 ft. long by 20 ft. wide with a draught of $2\frac{1}{2}$ to 4 ft. 8 in. when loaded. The draught of the steam launches is usually from $3\frac{1}{2}$ to 5 ft.

As the numerous inland waterways of Kwangtung vary widely in character, so there are many minor differences in the shipping met with in different parts of the province. But in the main the types are constant, consisting of passenger and cargo junks, sampans and small rowing boats. The difficulty of the more or less extensive shallows which occur in nearly all the rivers of Kwangtung is met by the very general use of flat-bottomed boats. Some of these, indeed, have a remarkably shallow draught for their length and beam; as for instance on the upper waters of the Mei River

where boats are used of 40 ft. length and 8 ft. beam with only 6 in. draught. The junks commonly seen on the smaller rivers have a draught of 1 to 2 ft. and a length varying from 40 to 100 ft., their carrying capacity ranging up to 6 and 8 tons. A rising stern is a common feature of these junks, and sometimes the prow too is elevated and tapering. They are propelled in various ways: (1) Sailing—up to 7 knots an hour, (2) tracking (or towing from the bank)—up to 2 knots, (3) poling—up to 2 knots, (4) by *yulo* [1]—up to 1½ knots, (5) rowing—up to 3 knots. Paddling is also used in the case of small sampans. These speeds are calculated for up-stream journeys in April. The speed down stream would be increased by 1 to 2 knots per hour; and during the rains 1 knot per hour would be deducted from the up-stream rate and 2 knots added to the down stream.

In the descriptions of the routes an account is given of the size and capacity of the different boats found on the several rivers of the province. The following are a few general types:

(1) The *shek-ma*, a type of junk built at Yingtak on the North River, is 60 ft. long with 9 ft. beam and 2½ ft. draught. It has 3 to 4 water-tight bulkheads. Deck houses occupy the greater part of its length and a footboard for poling runs along both sides. The capacity is about 30 tons. There is also a larger size, 80 ft. long with other dimensions proportionately greater. These boats could carry 40 or 50 men, and the crew is normally 4 to 6. They have a single mast and are sailed, towed or poled.

(2) *Junks* on the West River above Wuchow are stoutly built to encounter the rapids. They are 75 ft. long with 15 ft. beam and a draught when fully loaded of 5 to 6 ft. Their capacity is 40 to 47 tons. They are steered by a clumsy rudder 15 to 20 ft. long supplemented by a steering oar in bow.

(3) The *ho-t'au*, which takes its name from the town of Hotowhü on the Sunhing River, is a travelling house-boat much used on the West River and its tributaries. It varies

[1] The *yulo* is a long oar worked over the stern by a sweeping motion from side to side.

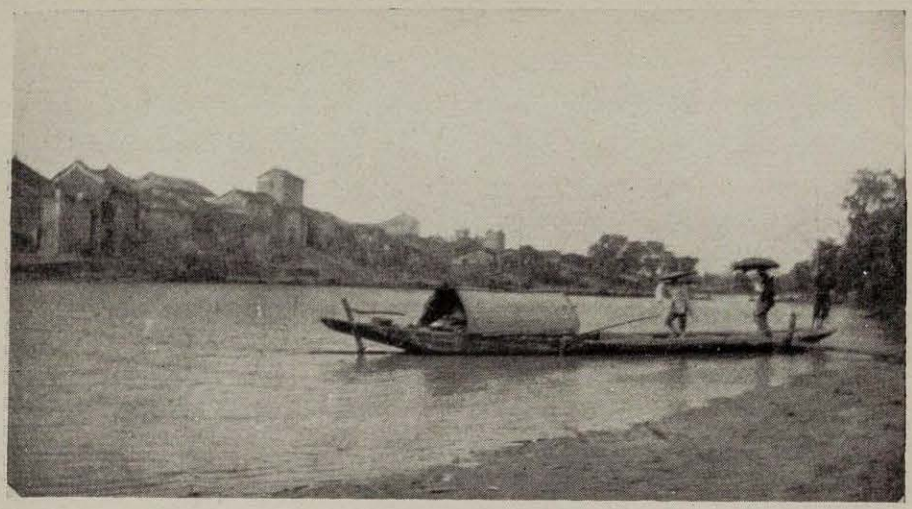
in size, but a typical example is 35 ft. long with 10 ft. beam and 1½ to 2 ft. draught. The deck house which is 7 to 8 ft. high extends almost the whole length of the boat and contains 3 or 4 compartments. A footboard of 12 to 18 in. width runs along the sides for the use of the crew when poling. A large rudder and a bow oar are used for steering, and it has one mast used for sailing or towing. The crew consists of 8 men.

(4) The *Sampan* type is smaller, being 25 to 30 ft. long with 7 ft. beam and a draught of 10 to 12 in. Half the boat is usually covered in by an arched roof of matting which can be extended over the rest. The covered part is not more than 5 ft. 6 in. high. The normal crew is 4, often consisting of 2 men and 2 women ; and the boat would carry 12 to 14 men. The *t'an-tzŭ* boat on the North River belongs to this type.

(5) *'Slipper' boats* (Ko-lang-ting) are small fast rowing boats of the shape indicated by their name, used for carrying couriers (and passengers) on the Canton river.

A few special types are met with on some of the rivers. On the Tsungfa River north of Canton a long narrow boat is found most suitable for the zigzag channel between the numerous dams. On the Bamboo River flat-bottomed boats of various sizes are used with a large room in the fore-part, the stern being occupied by the crew. These boats are sometimes fitted with a stern-wheel worked by coolies in treadmill fashion. Two types are common on the Han River and its tributaries, the sailing junk and the 'paper boat'. The former is a large punt-like boat, 35 to 40 ft. long, with a tall, narrow rectangular sail. It would carry about 16 men. The 'paper boat' (*liu-p'êng-ch'uan*), so called because it is largely used in the paper trade on the Han River, is a flat-bottomed junk with peculiar bow which sheers up to 10 ft. above the water, the incline being found helpful for poling. The 'paper boat' is rather smaller than the sailing junk.

Sea-going junks are to be seen in the deeper channels and river estuaries. They vary greatly in size, if little in general type. At Swatow the largest are the *lorcha*, about 476 tons ; next comes the *t'ou-mêng* and *hai-po* which average about



FERRY ON MOLI RIVER



LOKCHONG CARGO BOAT

357 tons, and among the smallest are the *hung-t'ou* and *ch'ing-t'ou* which vary from 178 to 238 tons. These are all 3-masted junks with the usual mat-sails and are employed in long-distance coast trade. They are met all along the coast, the *t'ou-mêng* being perhaps the commonest kind. For local coast traffic smaller junks are used, such as the *an-p'u-tu* (of about 41 tons) which ply between Onpo (An-p'u) and the Pakhoi district.

The junks built at Pakhoi are noted for their speed and seaworthiness.

Steam launches. There are large numbers of steam launches plying on the Pearl and West River, of which the following, the 'Samlee', is the general type.

Length	78 feet
Beam	18 ,,
Draught when loaded . .	5 ,,
Speed	Up to 14 knots
Coal capacity . . .	14 tons
No. of decks	2
Carrying capacity . . .	300 passengers
Crew	6 men.

The Chinese registered vessels ply on the various waterways within a radius of from 50 to 75 miles from Canton. They are constantly met with on all navigable streams, and it is computed that 250 of them are in daily use. Launches are also engaged in the coasting trade especially between Hongkong and Swatow.

Principal Launch Routes

Swatow district.

Swatow to Kityang, see Route 30.
,, Ungkung.
,, Tathowfow, see Route 2.
,, Chaochowfu.
,, Swabue and intermediate places, Kapchi and Kitchioh.

Chaochowfu to Samhopa, see Route 29.

Hongkong.

Hongkong to Swabue and intermediate places, Ngotow, Pakshasunhü, Pinghai, and Makung.
,, Macao and various delta ports.

Canton district.

Canton to Sheklung, Waichow, and Hoyün, see Routes 34, 22.
,, Tungkun.
,, Lupao, see Route 42.
,, Samkong, see Route 43.
,, Tailik, by the Pingday Creek, see Route 45, mile $15\frac{7}{8}$.
,, Samshui and West River ports by Moneypenny Creek and Tamchow Channel.
,, Fatshan, see Route 46.
,, Heungshan, via Chanchuen, Ho-k'ao, Jungki, Siulam, and Kong-hao.
,, Sunchong, via Chanchuen, Laklow, Kumchuk, Kongmoon, Sunwui, and Kungyifow.
,, West River ports, via Chanchuen, Laklow, and Kumchuk.
Samshui to Tsingyün and Yingtak, see Routes 55, 56.
,, Szewui, see Route 47.

Ferry boats at Shekwaitong. At Shekwaitong are the following ferry boats :

The ' Hanlee ', 115 ft. long by 22 ft. beam ; draught when loaded 4 ft. ; speed 14 knots ; coal capacity, 20 tons ; three decks ; carrying capacity, 1,200 passengers.

The ' Yueh Lee ', 112 ft. long by 20 ft. beam ; draught when loaded, $5\frac{1}{2}$ ft. ; speed 12 knots ; coal capacity, 20 tons ; three decks ; carrying capacity, 1,300 passengers.

There are also 3 launches carrying 300, 200, and 30 passengers respectively.

Steamers. The following steamers are engaged on the various runs between Hongkong, Canton, Macao, and the West River ports :

Canton–Hongkong.	*Nationality*
[1] Ho-nam, Po-wan, Fat-shan, Han-kow, Kin-shan, Heung-shan	British.
Kwong-chow (1,309 tons gross ; 800 tons net)	Chinese.
Kwong-tung (1,238 tons gross ; 750 tons net)	,,
Ying-king (1,088 tons gross ; 650 tons net)	,,
San-cheung (951 tons gross ; 575 tons net)	,,
[? Paul Beau (1,119 tons net), and Charles Hardouin (1,600 tons gross), transferred in 1913 from the Messageries Cantonnaises to the Canton Navigation Co.]	
Hongkong–Macao.	
[1] Sui-an, Sui-tai	British.
Wing-chai (1,055 tons net)	Chinese.
Canton–Macao.	
[1] Lung-shan	British.
Hongkong–Kongmoon, Kumchuk, Kowkong by the Broadway.	
Hongkong (664 tons)	Br. flag.
Kong-nam (402 tons)	Fr. flag.
Hongkong–Kongmoon, Kumchuk, and Samshui.	
[1] Lin-tan	British.
Tak-hing (616 tons ; 374 tons net)	,,
Hongkong–Kongmoon.	*Nationality.*
Hoi-ming	Chinese.
Kang-son	,,
Portugal (217 tons), and seven Chinese steamers entered on this run in 1916	Portuguese.
Tai-on	? Chinese.
Hoi-sang	British.
Macao–Kongmoon.	
Tak-on	Portuguese
Wa-sun (150 tons)	British.

[1] Details of these boats are given on p. 75.

Hongkong–Kongmoon, Samshui, and Wuchow.

Sun-wui	British.
Tai-ming (237 tons)	,,
Tung-on (477 tons)	,,
Hoi-wa (245 tons)	,,
Licorne	Chinese.
Cerf (263 tons, wooden)	,,
Kwong-hung (418 tons, steel)	,,
Shing-ping	,,
Kwong-ying (407 tons)	,,
Wa-hai (433 tons)	,,

Canton–Samshui and Wuchow.

Sai-nam and Nan-ning	British.
? Rhône (369 tons gross ; 259 tons net)	French.
Hoi-an (about 400 tons)	Chinese.
Kwong-wai	,,
Wu-chow (formerly Robert Lebaudy)	,,

Tung-kwong (motor-oil barge, 58 tons, Asiatic Petroleum Co.).

Of the steamers shown in the following table, three or four would generally be available at Hongkong for the transport of troops at short notice. These steamers are not armoured, and have very light steel bulwarks ; they should be convoyed by torpedo boats or armed launches. Ballast tanks to carry 200 tons of water are available on each steamer.

Tugs and cargo boats. About 50 tugs would be available at Hongkong, of which 30 would be under 7 ft. draught, and an unlimited number of barges, scows, &c., as cargo boats, with a capacity of 300 to 500 tons and a draught of 5 ft. loaded. There are also a few passenger boats in Hongkong, in addition to those already mentioned and of similar type, carrying about 500 passengers. The Standard Oil Co. in Canton has a tug-boat (the Comet) of 80 ft. length, 15 ft. beam, speed 12 knots, draught 7 ft., 26 tons register, and carrying capacity of 150 persons ; 2 wooden lighters (Helen and Ruth) of 360 tons

PARTICULARS OF STEAMERS OF THE HONGKONG, CANTON AND MACAO STEAM BOAT COMPANY LIMITED [1]

Name of Vessel.	*Length.*	*Beam overall.*	*Draught light.*	*No. of decks.*	*Gross tonnage.*	*Net tonnage.*	*Speed.*	*Licensed No. of passengers.*	*Construction.*	*Engine.*
Honam . .	275	40 70	8·6	3	2,363	1,377	14 kt	2,049	Steel paddle	C.S.C. 500 N.H.P.
Heung Shan .	300	44 54	8·4	3	1,998	979	14 „	2,351	„ Twin Screw	T.E. 344 „
Powan . .	233	34 54	8·8	3	2,338	1,843	10 „	2,189	„ Single Screw	C.S.C. 120 „
Kinshan . .	300	44 54	8·6	3	1,994	1,092	14 „	2,610	„ Twin Screw	T.E. 350 „
Fat-Shan .	280	54	9·3	—	2,260	1,425	—	1,800	„ „ „	
Sui-Tai . .	245	30 36	6·0	3	1,600	1,005	10 „	1,268	„ „ „	T.E. 120 „
Sui-An . .	245	30 36	6·0	3	1,600	1,005	10 „	1,268	„ „ „	T.E. 120 „
Han-Kow .	—	—	—	—	3,073	1,800	—			
Lungshan .	110	25	7·6	2	240	140	10 „	240	Composite Screw	C.S.C. 50 „
Lin-Tan . .	200	35	6·0	—	873	655	—	4,000	Twin Screw	
WEST RIVER SERVICE, CANTON—WUCHOW LINE										
Sainam . .	185	27	4·0	3	588	367	10 „	400	Steel Stern Wheel	Horizon 90 ,
Nanning . .	185	27	4·0	3	588	367	10 „	400	„ „ „	„ „ „
BRITISH WEST RIVER STEAMSHIP COMPANY										
Sun-wui . .	160	28	6·0	3	322	195	—	600	Screw	T.E. 120 „

[1] All these vessels are in first-class condition and are at present employed in the service of the Company between Hongkong, Canton, Macao and riverine ports.

register, 120 ft. length, 25 fr. beam, draught, 4 to 8 ft., and cargo space of 17,000 cubic ft. ; 1 steel lighter (Mei-foo) of 520 tons register, 150 ft. length, 35 ft. beam, 5 to 6 ft. draught, cargo space of 30,000 cubic ft. ; 1 iron lighter (Tai-yat) of 100 ft. length, 20 ft. beam, 2 to 7 ft. draught, cargo space of 10,000 cubic ft. ; 1 motor launch of 36 ft. length, draught 4 ft., speed 10 knots. The same company has several tugs and lighters at Hongkong.

Accommodation

Houses, inns, and billets. Kwangtung possesses many large cities, especially in the rich and prosperous region of the Delta. All the larger towns are surrounded by walls ; the whole of the interior is not, however, generally built over, and in most cities large open spaces are to be found, which are sometimes used as vegetable gardens. When a town is situated on a river bank, the foreshore between the city wall and the bank is almost invariably occupied by a street of large houses, and here all the merchants live and conduct business. Round all the larger towns are extensive suburbs, market gardens, and generally some temples.

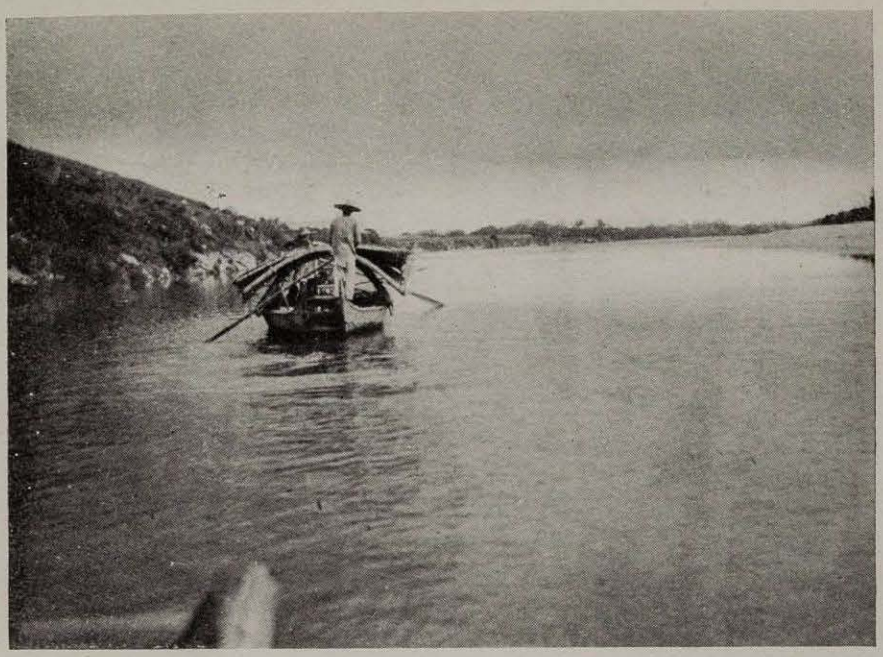
The streets both in towns and villages are narrow, excessively dirty, and paved with stone slabs.

Many of the better class houses are built of bluish grey brick with granite foundations, and comprise a greater or less number of courtyards, into which the rooms open. The houses of the poorer classes are generally mere hovels, formed sometimes of mats on a framework of bamboo.

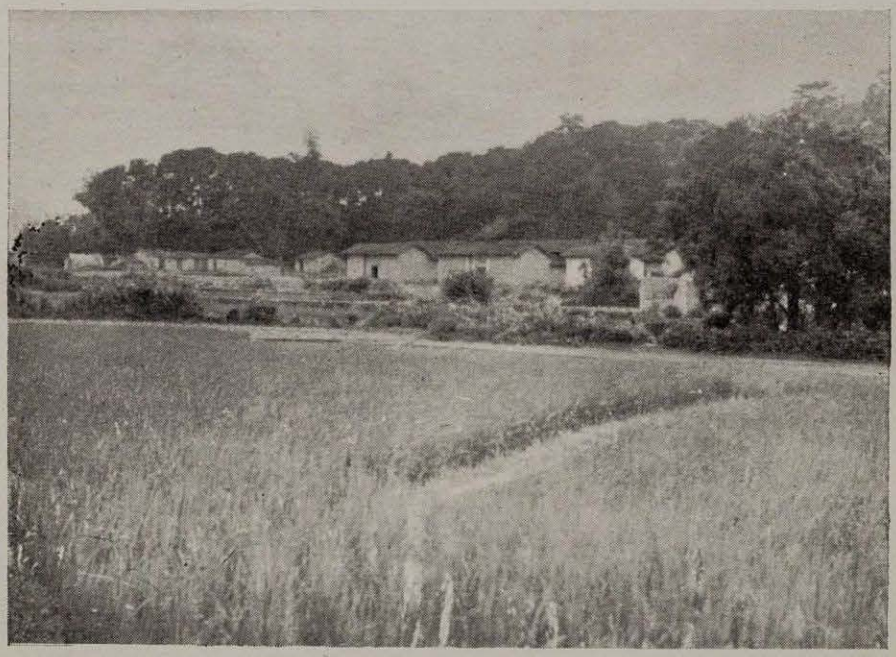
In Swatow and its neighbourhood the principal material for house construction is earth or river sand or decomposed granite mixed with lime. This is rammed between boards, hardens, and appears to be most durable.

Nearly every village has one or more temples, which are commodious well-constructed buildings provided with several spare rooms, some for the use of the priests, and others for the accommodation of travellers.

Chinese cities, towns, and villages are in general most



BOAT ON LENGKANG RIVER



TYPICAL FARMHOUSE

insanitary, since no system of drainage is employed. Large tubs are placed in the courtyards of houses as urinals, and the corner of a street generally serves as a latrine, the contents of which are collected and sold as manure. Ordinary dirt is allowed to accumulate everywhere, and rubbish heaps and stagnant pools may be seen around the dwelling houses in every village and town. For these reasons it is as well to avoid as far as possible billetting troops in Chinese houses, though the procedure is possible. An exception may be made in the case of temples and other large isolated buildings, which frequently afford excellent accommodation.

Inns exist in all market towns and vary only in squalor. They consist of wood-partitioned cubicles in which a trestle bed and boards covered with matting and overhung by a mosquito net, occupies nine-tenths of the available space. The floor is of mud, and a table may or may not be provided. The whole of the ceiling and walls are covered with soot and the wood smoke during cooking hours, which are extensive, is scarcely bearable. An inn will seldom accommodate more than eight Europeans.

Yamens, the combined offices and residences of the officials, are commodious compounds. There are many offices and rooms, and the district magistrate's yamen would generally accommodate 120 men. A Prefect's yamen would accommodate 200.

Camping grounds are numerous.

CHAPTER VI

COASTS, ISLANDS, HARBOURS, LANDING PLACES, &c.

Western boundary to Onpo—The Luichow Peninsula—Kwangchowwan to Hoi-ling-san—Hoi-ling-san to the Broadway—The Broadway to Hong-kong Leased Territory—The British Leased Territory—Mirs Bay to Chi-lang Point—Chi-lang Point to Breaker Point—Breaker Point to Good Hope Cape—Good Hope Cape to Fukien—Landing Places in East Kwangtung—Tides—Currents—Lighthouses.

THE coast-line of Kwangtung is for the most part rocky and deeply indented. It is fringed with numerous islands, and contains many serviceable harbours. Stretching from Moncay on the Tonkin frontier to the border of Fukien, opposite Namoa Island, it measures about 800 miles exclusive of inlets ; and it includes the largest delta in China, that of Canton, and the truest peninsula, the Luichow, off which lies the largest island, Hainan. Of all the provinces of China it is best provided with ports.

1. FROM WESTERN BOUNDARY TO ONPO

The greater part of the western coast-line of the province lies on the Gulf of Tonkin ; and its shores have been only partially surveyed. The western boundary is the Chuk-shan River, the eastern arm of the delta of Moncay, and from here to Cape Paklung the whole coast is fronted by a shallow bank. Behind this bank is the large **Bay of Kuan-wan,** which is mostly dry at low water. It contains, however, a secure anchorage for light-draught vessels, though it is difficult of approach. The south-east side of this bay is protected by the narrow mountainous promontary of Cape Paklung ; and east of this is another deep indentation forming the estuary of the Fangcheng River. From here a strip of little-known coast extends to Tiao-tan Island, about 14 miles east of Cape

Paklung. Then comes the large estuary of Lung-mên, about 10 miles wide and encumbered by numerous shallow banks with narrow channels between. Several large rivers empty into this estuary, including that on which stands the city of **YAMCHOW** (see *Gazetteer*). The bar is 6½ miles east of Tiao-tan, and has 12 ft. of water at low tide ; and 12 miles above it is the serviceable anchorage of Lung-mên, the port of Yamchow. At the eastern entrance of this estuary is the island of Tui-mui-tiao. The coast-line now forms a long shallow bay at the south-east corner of which is the **Bay of PAKHOI** and the estuary of the Limchowfu river. The bay of Pakhoi (see *Gazetteer*) is protected on the south by Kwantau Point, and affords a good anchorage. East of Kwantau Point to the north-eastern corner of the Gulf of Tonkin the coast is little known. It includes the large estuary of Ying-lo Bay, which has three long arms, that on the west receiving the Chap-hao River, the central one being an arm of the sea, and that on the east the estuary of the Kap-shui River ; and in the immediate corner of the gulf is the port of **ONPO** (see *Gazetteer*), approached by a channel between two large sandbanks.

2. The Luichow Peninsula

From Onpo southward the west coast of the Luichow Peninsula is unsurveyed. A few details obtained from Chinese sources are given by Hirth,[1] from which we learn that the anchorage of **Ha-lok-kong** (Hsia-lu-chiang), 6 miles south of Onpo, is difficult of approach owing to hidden rocks. At **Lo-min** (Lok-man) 'sea-going vessels may lie at anchor'.

At Pok-li-kong (Po-li-chiang), 15 miles farther south, the coast becomes rocky and dangerous ; and the same is recorded of **Hung-pai** anchorage and of Hoi-kong (Hai-k'ang), 12 miles further south. **U-shek** (Wu-shek) anchorage is shallow and sandy. Behind it is U-shek hill, and 4 miles south of it is **Nau-sa** (Lau-sha-kong) **Bay** and River where junks can anchor. The coast here is low and wooded, gradually rising to Car-

[1] The Peninsula of Lei-chou, F. Hirth, *The China Review*, vol. ii, p. 155.

penter Hill. South of Nau-sa Point is **Tong-chong** or **Safe Bay,** about 5 miles in length and affording shelter from off-shore winds. At the south-west corner of the peninsula is Cape Kami (Chio-wei), and the anchorage of **Hai-chu-chiang.**

The island of *Wei-chao* in the Gulf of Tonkin lies 23 miles south of Pakhoi. It is 4½ miles long by 3 miles wide. It is fertile and well cultivated, and has a population of 6,000, nearly all Hakkas. About one-third are Roman Catholics under the charge of two French priests. The chief occupation of the islanders is fishing. The south and west sides of the island are composed of hills rising abruptly from the water, the summit being Hampel Hill (279 ft.). On the south side is **Nam-wan Bay,** which affords a good anchorage in 4 to 5 fathoms sheltered from all winds except south-south-east and east-south-east. For the island of Hainan see Chap. XIII.

The south coast of the Luichow Peninsula is for the most part low and shallow, the approaches being encumbered by extensive sandbanks. Anchorage may be found off Cape Kami from north-west and north-east winds. From this point **Kami Bay** extends for 11 miles to Islet Point, beyond which at a distance of 3¼ miles is Palm Point, the western extreme of **Hoingan Bay.** This bay is shallow, but affords anchorage from northerly winds. In the centre of it is the small town of Hoingan, and at the south-east corner is the village of Bak-sha, 3 miles distant. From this bay eastward the coast for 6 miles is uncharted, as far as **Hong-ham Bay,** where there is another anchorage protected from the north.

Low islands and shallow banks fringe the coast from here to Gopai Point, the eastern extreme of the Luichow Peninsula, and similar encumbrances extend up the eastern coast of the peninsula to Nau-chau Island. There are channels between the banks, but they are little known and require local guidance. North of Gopai Point are the junk harbours of **Kumnong** (P.) (Malu-hau), and **Pan-kau-wan** ; and from here to Bécassines Point, some 18 miles, the coast is fronted by a reef and three small islands, and has not been surveyed. Bécassines Point is at the entrance of **Mandarin Bay,** a deep indentation which

receives the river flowing from **LUICHOW** (see *Gazetteer*). North of this is a shallow channel leading between Tan-hai Island and the mainland to Kwangchowwan. The Islands of Nau-chau, Tan-hai, and Les Aigrettes protect the approaches to Kwangchowwan, and are included in the description of that port (p. 125).

3. From Kwangchowwan to Hoi-ling-san

From Kwangchowwan north-eastward the coast is low and sandy for 10 miles to the estuary of the Muiluk River. This estuary is encumbered by banks and is unsurveyed, but about 5 miles up it on the east side is the harbour of **NGCHÜNYÜN** (see *Gazetteer*), which is said to be small but good for shallow-draught vessels. From here the coast continues low, with a few small hills, for 24 miles, as far as An-kang-shan hill, and it has not been sounded. It is said to be barred by a continuous sandbank. An-kang-shan is a bold hill, 515 ft. high, situated close to the shore, and from it extends eastward a low peninsula about 6 miles long, enclosing **SHUITUNG** harbour (see *Gazetteer*). From here to Tinpak the low coast is only broken by Chin-shan hill (70 ft.) about mid-way between the two places, and is fronted by a sandbank and several small islands. **TINPAK** harbour (see *Gazetteer*) lies in a narrow-necked lagoon protected on the south and east by the hilly peninsula of Lam-tau, at the southern extremity of which is Sie-ho Point.

From Tinpak eastwards the coast is more mountainous, with frequent inlets receiving rivers, and numerous rocks and islands offshore. Immediately east of Sie-ho Point are the small islands of Tai-chuk-chau and Chin-chau, behind which there is a deep indentation in the coast into which two rivers flow. The more easterly and larger of these rivers is the Wu-lan Ho ; and near the mouth of it is the town of **Yütung** (Gui-tung), P. T., with its shallow bay and boat harbour, lying inshore of Chin-chau Island. Ten miles east of Chin-chau Island is Song-yui (Shuang-yü) Point, a low sandy promontory which protects a small bay and the estuary of the river, on

which stands the town of **Cheong-yu** (Shuang-yü-so). Immediately beyond this point is **Hoi-ling-san Bay** and harbour, with the Rugged Mountains in the background. The east side of the bay is protected by the large island of Hoi-ling-san, and on the west are two rocky islets with sunken reefs known as The Brothers. Hoi-ling-san (Hai-lin-shan) island is 12½ miles long and 2 to 4 miles wide, and rises to 1,350 ft. in the centre.

On the south-west side is a sheltered anchorage where one or two large vessels could ride in 4 to 6 fathoms, and there is room for numerous small craft. Chappo (P.) lies at the north-east corner of the bay; and Chino village, south-east of the boat anchorage, affords supplies of water and provisions. For plan of Hoi-ling-san Harbour see Admiralty Chart, No. 2212.

4. From Hoi-ling-san to the Broadway

The coast between Hoi-ling-san and Tai-oa Point, a distance of some 16 miles direct, is uncharted. It is a large bight at the west end of which is the estuary of the Pok-mi River, while at the eastern end is **Deep Bay.** Deep Bay is fronted by shallow water, but is largely used by native junks, which sail up the estuary of the Mak-yeung River to trade with **YEUNGKONG** (see *Gazetteer*). On the west side of Tai-oa Point is a small bay and village of the same name.

Tai-oa (Ta-ao) Point separates Deep Bay from **Shallow Bay,** into which flows the Na-fu River, past the Lip-mao Mountains (Li-mao-shan) on the left bank. Beyond this a long arm of the sea runs up to Ta-hu-shan, enclosed on the east side by the island of Hai-yen.

A cluster of islets extend eastward from Hoi-ling-san towards Hau-cheun (Hsia-ch'uan) and Chang-cheun (Shang-ch'uan), a pair of large islands lying south-east of Shallow Bay. The more westerly of the two, Hau-cheun, is 10½ miles long by 3 miles wide, and has two small bays on the south-west side affording anchorage protected from the east. On the south side is the harbour of **Namo** (Na-wu), a well-sheltered

anchorage protected by the island of Namo, which is 1½ miles long and rises to 500 ft. For plan of Namo Harbour see Admiralty Chart No. 2212. At the head of the bay is Namo (P.), with a good watering-place east of it. The sea between Hau-cheun and Chang-cheun is dotted with five small islands. Chang-cheun or St. John Island, where St. Francis Xavier died in 1552, is 14 miles long with a narrow waist in the middle, where **Sandy Bay** on the west is separated from **San-ki Bay** on the east by a low sandy isthmus. There is an anchorage in **Shi-to Bay** at the south-west corner of the island off Sha-ti village. For plan of Shi-to Bay see Admiralty Chart No. 2212. Liu-chiu Island lies off the south-east corner of Chang-cheun. From here across the mouths of the Canton Delta stretches a dense archipelago. The outer chain of islands stretching from Chang-cheun to the entrance of the West River includes The Flies, Tai-kam, Ku-kok (Niu-chio), Kau-lan, and San-chau (San-tsao), mostly bold and mountainous. Inside these are numerous islands of various sizes, all surrounded by comparatively shallow water, with channels leading to the coast which are used by native craft. Behind Kau-lan is the anchorage of **Nam-sui,** situated between the islands of Lam-puk-sui and Sam-hoi-chuk, sheltered from all winds except the east, and with depths of 9 to 16 ft. over a space of about 2 miles.

The mainland behind this screen of islands is fronted by shallow banks. On the coast north of Chang-cheun is the town of **Kwonghoi** (P.). A few miles further east is the island of Tong-kwa, on which is the town of **Chikkaiting** (P.) ; behind it is the estuary of the Ku-kok (Niu-chio) River and the creek which leads to Towshan, the terminus of the Sunning Railway (see p. 151). North-east of this estuary is the town of **Tohuk** (P.), just below the entrance of the Ngaimoon and Fotomoon mouths of the Canton Delta. The Ngaimoon channel leads into the **KONGMOON** Creek (see *Gazetteer*), past the entrance of the Tam-kong River which flows in from **SUNCHONG** (see *Gazetteer*). This entrance to the delta is used entirely by native craft.

5. From the Broadway to the Hongkong Leased Territory

The archipelago which lies across the entrance of the Canton Delta, extends for more than 50 miles from Sam-chau Island to Basalt Island east of Hongkong. Most of these islands are bold and mountainous, but with few inhabitants. They are, however, important to navigation, and are described in detail in the *China Sea Pilot.*

The Broadway, the main entrance to the West River, is approached by a channel between Sam-chau on the west and Wang-kam (Hêng-ch'in) Island on the east, with Ross Island and a few scattered islets between. It leads to the Motomoon entrance of the West River, passing the little used Niwan-moon on the west. Closely adjoining Wang-kam, and on the east side of it, is the island of Colowan (Kao-lu-wan); and north of these two are Macarira and Taipa Islands, which protect the harbour of Macao on the south. **Macao Harbour** is enclosed on the west by the island of Tui-mien-shan or Lappa. For a description of Macao and its surroundings see p. 119.

The whole of the delta, a flat alluvial land with scattered isolated hills, may be regarded as a series of islands separated by creeks and rivers. The southernmost and largest of these is Heung-shan, which has the Macao Peninsula at its southern extreme, and the new port and harbour of **HEUNGCHOW** (see *Gazetteer*) and the anchorage of **Kum-sing-moon,** a safe harbour for small vessels, on the east side. The Canton Delta is treated separately in Chap. XII.

Kum-sing-moon Harbour lies between Bluff Head, the most easterly point of Heung-shan, and Ki-au Island. North of it is the channel known as Junk Fleet Entrance, a passage between shoals and mud-flats leading to the Wangmoon, one of the main entrances of the delta, and to the important Tamchow Channel (see p. 163). The next channel, separated from the last by low reclaimed lands fronted by shallow flats, is Lankit Entrance, west of Lankit Island, which leads to Tai-kok-tau

and Mount Channels, and to Wilder Passage at the back of Tai-kok-tau Island.

The main entrance to the Canton River is the Chuen-pi Channel, leading into the Bogue between the fortified islands of Tai-kok-tau on the west and Chuen-pi and A-nung-hoi on the east.

For the Canton River see p. 171.

The eastern shore of the Canton River estuary from Chuen-pi Island to **Deep Bay,** a distance of 25 miles, trends south-east. It is difficult to approach owing to the shallowness of the water. The coast is fringed with mangrove swamps, reached by the sea at high tide, but at low tide the sea recedes for about a mile, uncovering oyster beds of rich mud.

Chuen-pi Island is separated from the mainland by a creek navigable for shallow-draught boats ; and south of it is **Cha-pin Bay.** South of this bay is a small river navigable for junks drawing 3 ft. as far as the village of Ku-tao, a short distance inland ; and 2 miles further south is the town of **Fukwing,** P., which can be approached by small boats at high tide.

The town of **Kushü,** P., is on the promontory at the north end of Tai-shan Bay. It can be approached within half-a-mile at the promontory by launches drawing 4 ft., and a large number of sampans could be found there. There are commanding hills about a mile inland. From here to Nam-tau Peninsula extends the shallow bay of **Tai-shan,** about 6 miles wide, in which are several towns and numerous villages. On the north side is **Saikeung,** P., and in the centre is the walled district town of **Sun-on-yün** (Hsin-an Hsien), also called Nam-towshing, P. This district is one of the Hakka centres.

Nam-tau Peninsula, with low-lying base and hilly end, is about 3 miles long, and runs in a south-westerly direction. At the south-west end is the small bay and village of **Chek-wan** surrounded by hills. Launches drawing 5 to 6 ft. can enter the bay, but it is necessary to use sampans for landing, and few of these would be available except during the annual 3-day festival in March. South and east of Nam-tau Peninsula is the Deep Bay : see p. 87.

There are several islands off Tai-shan Bay—Syah, Sui-shan, Tai-shan, and Ma-chau—the largest of which is Tai-shan. About 6 miles south-west of Nam-tau Peninsula is the island of **Lin-tin,** about 3 miles in perimeter, and rising to 1,140 ft. There is an anchorage about 1½ mile from the south-west side of Lin-tin, and water and some supplies could be obtained on the island.

The Great West Channel leading into the Canton River estuary lies between Wong-kum and the Ladrone group. The Little and Great Ladrones are close together, and both are bold and mountainous, the latter rising to about 1,500 ft., and having on its west side **Pumice Stone Bay,** an anchorage for fishing boats. Two miles north-east of the Great Ladrone is Pu-toi Island, which has numerous bays and inlets; and 2½ miles north of the Little Ladrone is Tong-ho Island, which has two sheltered bays, **Nam-sha** on the west and **Boddam Cove** on the east, connected by a road. Water and some provisions are procurable here. North-east of this group, between the Ladrones and Lan-tau Island, is a host of small rocky islets; and south-east of them is the outer fringe of the archipelago formed by a line of islands running north-east and south-west, and comprising two main groups, the Kai-pong and the Le-ma. The Kai-pong group, at the north-west end of the line, extends some 10 miles from Gap Rock, which has an important lighthouse and signal station. The Le-ma group continues the line for nearly 13 miles, and comprises five small islands of barren appearance, inhabited by a few charcoal burners. The largest and most easterly of the group is Tam-kan, which is about 6 miles long, with **Joss-house Bay** and anchorage at its north-eastern end. North of this group is the Le-ma Channel leading to Hongkong, and through the Lan-tau Channel into the Canton River estuary.

6. The British Leased Territory

A detailed account of the Leased Territory of Hongkong will be found in the *Military Report on Hongkong*, 1907; and the barest outline is all that is necessary here. The

Leased Territory consists of that part of the mainland opposite Hongkong which lies south of a line drawn between Deep Bay on the west and Mirs Bay on the east, the waters of both bays being included in the British sphere, together with some adjacent islands. The off-lying islands are bounded by Tung-ko and Lan-tau on the west, by A-chau and Pu-toi on the south, and the eastern boundary is a line drawn south from Mirs Point.

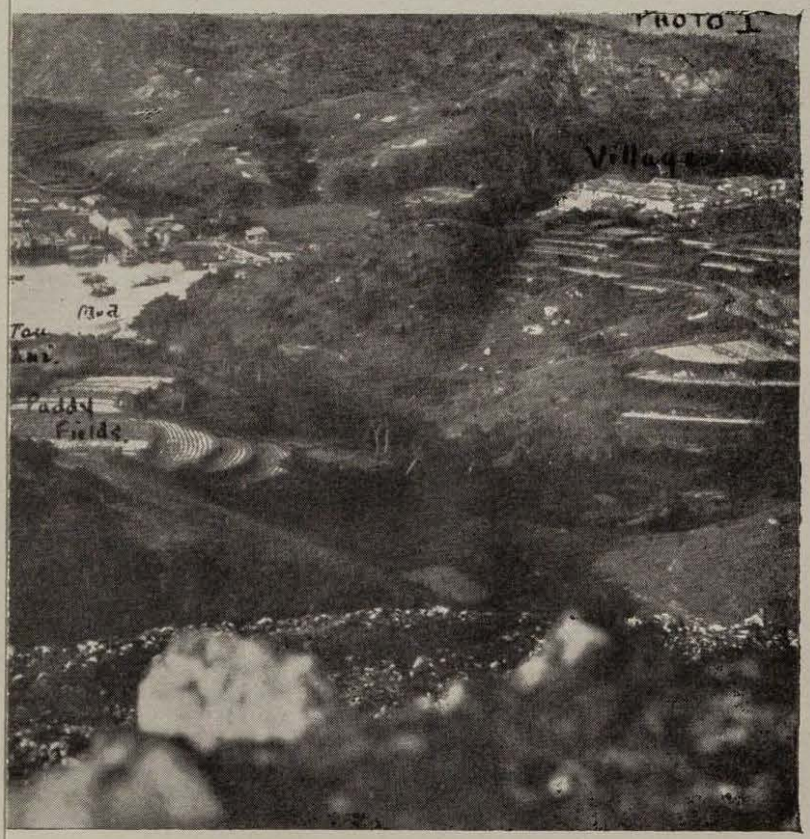
It is in the main a rugged, mountainous country and the coastline is a succession of peninsulas and deep bays and inlets thickly studded with islands. The central points are Hongkong and the Kowloon Peninsula with their important commercial, naval and military appointments. But the whole coast abounds in sheltered harbours and anchorages suitable for shipping of various tonnage and usually crowded with small craft in stormy weather. At the north-east corner of the Kowloon Peninsula is the city of **Kowloon,** past which the railway runs to Canton ; and there are numerous Chinese towns and villages along the coast of which the more important include **Shatow** at the head of Deep Bay, **Shatowkok** on Starling Inlet on the north-west of Mirs Bay, **Sha-ü-chung** on the north-east coast of Mirs Bay, and **T'ip-fuk** in a small bay in the middle of the east side.

Deep Bay, or Hau-hoi-wan, is about 4 miles wide at the entrance which lies between Nam-tau Peninsula on the north and Black Point on the south, and runs some 9 miles inland. It is shallow, but is used by native junks and launches which trade with **SHUMCHÜN** (see *Gazetteer*). This city lies up the Shumchün River which flows into the north-east corner of the bay. On the opposite side of the Territory a series of deep bays run inland in a westerly direction from **Mirs Bay,** the largest being **Tolo Harbour** and Channel which together have a length of some 12 miles. Mirs Bay itself is about $5\frac{1}{2}$ miles wide at its entrance between Fung Head on the west and Mirs Point on the east, and it runs northward for about 12 miles. There is a sheltered landing-place on the east side of Mirs Bay opposite Peng-chau Island.

Of the off-lying islands Lan-tau on the west of Hongkong is the largest, being 13 miles in length and 6 miles at its widest part. Like the others it is rocky and mountainous, rising to 3,065 ft. at its summit. Another large island is Lamma which lies close to Hongkong on the south-west side. Wag-lan Island at the south-east corner of the group is small but important to navigation on account of its lighthouse.

7. From Mirs Bay to Chi-lang Point

Between Mirs Bay and the neighbouring **Bias Bay** is a hilly peninsula deeply indented on its eastern side and at one point —**Tai-p'ang Harbour**—almost cut through. The Tuni-ang group of small islands lies off the southern end of the peninsula, and among them is the anchorage of **Samun Road.** Bias Bay is a large inlet with mountainous shores and numerous coves. Its entrance, between Teyi Point and Bias Point, is about 8 miles wide, and it extends north and north-east for 17 miles. The west shore is fronted by a chain of islets, behind which are Tai-p'ang Harbour and above it **Dumbell Bay.** In the north corner of the former there is a good landing-place close to the town of **TAI-P'ANG-SHING** (see *Gazetteer*). At the south-west end of Dumbell Bay is Pa-kong, and in a subsidiary inlet on the north side is **Ngotow** (P.) where there are landing-places. There is regular launch communication between Ngotow and Hongkong and Swatow ; and a ferry service between Ngotow and Pa-kong. At the north-east corner of Bias Bay is a deep inlet at the back of which is the town of **Fan-lo-kong** in a well-cultivated plain surrounded by mountains. Just inside Bias Point is a small bay and landing-place by **Pakshasunhü** (P.). From Bias Point the coast trends eastward to Harlem Bay which is protected on the east by a long sandy peninsula terminating in hills at Fokai Point. The town of **PINGHAI** (see *Gazetteer*) lies close inland from Harlem Bay between a creek which flows in to the west side of the bay and a long, narrow lagoon which is entered at the south-east corner. There are landing beaches along the sand-spit which fronts the lagoon and in


PHOTO 1
Village
Road
Paddy
Fields



NGOTOW HARBOUR

a small bay south of its entrance immediately east of Hebe Island. The country round Pinghai is flat with hills in the background which culminate in Harlem Peak (2,070 ft.). Mendoza Island and a few islets and rocks lie off Harlem Bay.

From Fokai Point the coast trends north-eastwards to Ross Head, 11½ miles distant, three miles south-west of which is **Samchau Inlet,** a narrow intricate channel leading into a lagoon. Near the head of this lagoon which penetrates about five miles inland is the town of **Tachow** (P.). The country here is flat and swampy as far as Ross Head where a range of hills reaches the coast from a north-westerly direction. Between Ross Head and Tsiech Point, about 20 miles east, is **Hong-hai Bay,** in which are several minor bays and inlets, and a few small islands. A river with wide estuary flows into the western corner of the bay, and some 8 miles east of it a narrow peninsula is thrown out in a south-easterly direction terminating in Mace Point. At the base of this peninsula and on the west side of it is the landing-place (see p. 583) and village of **Howmoon** (P.) ; a few miles inland from it is the town of **Bueleng** (P.). Between Mace Point and Club Point is the entrance (2 miles wide) to **Shoal Bay,** a shallow and well-enclosed bay at the north-east corner of which is the estuary of the river leading to **HOIFUNG** (see *Gazetteer*) from which a creek goes eastward into **Hie-che-chin Bay.** The surrounding country here is mostly flat. Club Point is at the end of a peninsula which runs out westward, and just north of the Point is a small bay with the landing-place and village of **Makung** (P.). About 7 miles east of this is the entrance to **Tai-sami Inlet,** a large lagoon approached by a channel about ½ mile wide. At the north of the entrance is **SWABUE** (see *Gazetteer*). On the south side of the Inlet is a hilly promontory at the south-west corner of which is Tsiech Point. South-east of the Point lies Goat Island and between them is a good anchorage in the north-east monsoon. North of Goat Island and about 2 miles inland is the town of **Chiap-cheng** (Hsieh-hsing), and about 7½ miles eastward is Chi-lang Point and lighthouse. The land on either side of the

Point is of a remarkable red colour with black mounds; and west of the Point is a small bay where good anchorage is found in the north-east monsoon and where landing could be effected.

8. From Chi-lang Point to Breaker Point

East of Chi-lang Point is Hie-che-chin Bay the entrance of which is between Chi-lang and Tongmi Points, a distance of about 15 miles. The bay is 10 miles deep, with irregular contour. Off the western entrance is Kin-yu Island, behind which Paukshao Peninsula runs out in a northerly direction shutting in the shallow **Paukshao Bay** from the east. North of this bay a range of hills reaches the coast, running north-east from Tai-sami Inlet, the summit being Mt. Simpson (1,773 ft.). At the north-east corner of the bay is another range of hills culminating in Round Mt. (1,430 ft.); and between these two hill systems the land is flat and swampy, with two river estuaries, the more easterly of which leads to **LUKFUNG** (see *Gazetteer*). The shores of the bay are thickly populated, with numerous villages and towns. There are some salt-pans in this district. South-east of the Lukfung River mouth is Kin-siang Point, between which and Chino Point is **Chino Bay.** The northern end of the bay is backed by hills, the southern end being flat, and south of the hills is a narrow inlet leading into a long narrow lagoon on the shore of which is the town of **KITCHIOH** (see *Gazetteer*). A landing-place could be found at the entrance of the lagoon on the north side; or, in the south-west monsoon, on the shore west of Kin-yu Island on the opposite side of the bay.

From Tomgmi Point the coast trends north-east for $5\frac{1}{2}$ miles to Black Rock Point and 3 miles further to Hu-tung Point. West of the latter is the mouth of the Hu-tung River. The coast here is flat, but the hills come down to the sea a few miles east of Hu-tung Point; and $4\frac{1}{2}$ miles east of the same point is the estuary leading to the town of **Kapchi** (P.). There are two forts at the entrance which is dangerous for navigation, and the town lies about 2 miles up on the right

bank. From the estuary the coast runs south to Kapchi Point, immediately west of which there is a small landing-place.

From Kapchi Point the coast trends north-east and is low and sandy ; Black Mt. (230 ft.) at 4½ miles distance from the point is a conspicuous landmark. Nine miles beyond Black Mt. is an estuary which receives the Lung Chiang (Leng-kang), Lin-chao-ch'i and Chiang-ch'i Rivers. From here the coast trends south-east, with Tung-ao village at 1¾ mile distance, in front of which is the anchorage of **Tung-ao Road** with a possible landing-place. The Lengkang River flows in from a westerly direction from the towns of **KWEITAM** (see *Gazetteer*) and **Lengkang** (P.). The Chiang-ch'i comes in from the north and the town of **HWEILAIHSIEN** (see *Gazetteer*) is situated a short distance from its mouth. About 9 miles east of Tung-ao are Breaker Point and lighthouse, the intervening coast being mostly flat with occasional hills. Two short ranges approach the coast in the neighbourhood of the Point, the first having Dome Hill (111 ft.) at its eastern end and the second Round Hill (380 ft.), both of which are good landmarks.

9. From Breaker Point to Good Hope Cape

Beyond Breaker Point the coast runs north-east to Tong-lai Point, 4 miles distant, at the northern end of a small bay into which a creek flows from **Tsinghai** (P.). The anchorage in the bay is unsafe. Rocky Point is 1¼ mile north-east of Tong-lai Point, and from here the coast trends northward. Between this point and Hai-mun Point, 7 miles distant, is **Hai-mun Bay.** From Rocky Point for 4½ miles the coast is low and dangerous owing to reefs and rocks ; and beyond this distance it turns sharply west into an inner bay behind which is a group of hills. The coast there turns north-eastward forming a flat promontory which shuts in Hai-mun lagoon on the south side. At the base of this promontory is the village of Ts'an-sim from which a creek runs across to the lagoon. A landing-place could be found here in the south-

west monsoon, and in the northern part of the bay in the south-east monsoon. Hai-mun Point is at the end of a hilly peninsula which protects the entrance to the lagoon on the east side. Immediately east of the entrance is the town of **Hai-mun,** and a bar with 10 ft. of water at low tide runs across the inlet. The lagoon is spacious but shallow, running for about 7 miles westward to the mouth of the Shu Chiang River. Immediately north of the entrance is a shallow creek leading to the estuary of the Kityang River just above Swatow; and on the west side of this creek is **CHAO-YANGHSIEN** (see *Gazetteer*).

From Hai-mun Point to Tide Point at the south-west corner of Good Hope Cape, about 9 miles distant, is **Hope Bay.** The western part of this bay is shallow and the coast low as far as Tathowfow creek which runs from the Kityang River estuary into the north-east corner of the bay, giving a launch route to Swatow. From here the coast is more hilly; and there is a good anchorage and a landing-place in the north-west monsoon, especially in the small bay immediately west of Tide Point. From Tide Point the coast curves north-eastward to Good Hope Cape and lighthouse at the north-eastern end of this hilly peninsula.

10. From Good Hope Cape to Fukien

From Good Hope Cape the coast trends northward to the entrance of Port Swatow. Immediately north of the cape is a small bay with comparatively low-lying country behind it; but north of this bay is Vincent Range rising to 630 ft., and hilly country extends from here along the south shore of Swatow harbour. There are a few islets off this section of coast; and the important islands—Sugarloaf (Tak-su) with lighthouse, and Double Island (Ma-su)—lie in the entrance to the port. Further information about **SWATOW,** its harbour and these islands is given in the *Gazetteer*. A landing-place could be found on the coast west of Sugarloaf Island, and another at the mouth of the port on the north side. This deep inlet, on the north side of which Swatow is situated,

receives the southern arms of the Han River delta in its lower reaches ; and above Swatow forms the estuary of the river leading to **KITYANG** (see *Gazetteer*).

The Han River delta is a large alluvial plain more than 20 miles across at its widest part. It is thickly populated and has numerous towns and villages, the most important of which is Tenghaihsien (see *Gazetteer*). The coast of the delta runs north-east from the entrance of Port Swatow and comprises several large channels and many subsidiary creeks ; but there is little information available about them and they do not seem to be navigable except for small craft. The water off the delta coast is shallow. The branch which runs from Swatow to **CHAOCHOWFU** (see *Gazetteer*) at the head of the delta is only used by shallow-draught boats. The coast is deeply indented east of the Han River delta and the off-lying waters are crowded with islands and islets. On the north shore is a small river delta at the apex of which is the large town of **Ungkung** (P.), this has launch communication with Swatow ; and beyond this is **Chelim Bay** protected on the east and south-east by a peninsula which terminates in Fort Head. There is a good, but limited, anchorage in Chelim Bay, and the town of **Chelim** (P.), with a population of some 5,000, lies on the east shore. About 9 miles north-east of Fort Head is a shallow bay through which runs the eastern boundary of Kwangtung.

Of the cluster of islands off the east side of the Han River delta the outer group consists of the Lammocks, important for the lighthouse on High Lammock at the western end of the group. The largest island is Namoa which is 12 miles long and $5\frac{3}{4}$ miles wide. It lies $3\frac{1}{2}$ miles from the mainland and, though barren, is thickly populated by fishing folk. It is very hilly, the heights rising to 2,000 ft. ; and there are numerous bays and boat anchorages, the most important of which are **Clipper Road** and **Baylis Bay** at the south-west corner. The largest towns are **Lungao** (P.), in the centre and **Namoa** (P.), a walled town, in the north-east.

Landing Places in East Kwangtung

Mirs Bay : on east side opposite Peng-chau Island.

Bias Bay : Tai-p'ang Harbour and Ngotow on the west side ; Pakshasunhü at south-east corner of the bay.

Harlem Bay : In centre of the bay and east of Hebe Island

Hong-hai Bay : Howmoon, north-west of Mace Point ; Makung, north of Club Point ; Tai-sami Head.

Goat Harbour : north of Goat Island.

Chi-lang Point : on the west side between the Point and Flat Rock.

Hie-che-chin Bay : east of Kin-yu Island on west side of the bay ; on the north side of the entrance to Kitchioh lagoon ; Tong-mi Point.

Kapchi Point : on west side is a small landing-place.

Tung-ao Road.

Breaker Point : east of the lighthouse is a cove where small parties might land.

Hai-mun Bay : off Ts'an-sim village ; northern part of the bay.

Hope Bay : between Tathowfow Creek and Tide Point.

Good Hope Cape : south-west of Sugarloaf Island ; at the entrance of Swatow inlet on the north shore.

Tides

The rise and fall of the tides in Kwangtung is less than is the case farther north. Between April and October the maximum rise around Swatow is $8\frac{1}{2}$ ft. ; during the rest of the year the average rise is only about $2\frac{1}{2}$ ft. At Hongkong where the tides are very complicated, the maximum rise is 8 ft. At Canton the height of the tide varies from $2\frac{1}{2}$ to $5\frac{1}{2}$ ft.

Currents

The currents along this coast are not so strong as they are farther north, seldom running more than 2 or 3 knots. Swatow is, however, an exception to this rule, the currents there attaining a four-knot velocity.

Lighthouses

There are twelve lighthouses on the Kwangtung coast, which may be classed in four groups as follows :

Group.	*Lighthouse.*	*Height in ft. above high water.*	*Visibility (miles in clear weather).*
Hainan Strait	Cape Cami	67	13
	Hoihow	73	10
	Limko	63	13
Hongkong Harbour	Cape Collinson	200	8
	Green Island	95	14
West River Delta	Waglan	225	22
	Gap Rock	140	18
	Macao	330	20
Swatow	The Lammocks	241	22
	Sugarloaf	200	8
	Cape Good Hope	171	15
	Breaker Point	152	19

CHAPTER VII

THE WEST RIVER AND BRANCHES

General description—Character of the river—Navigability—Course—the Tso Kiang—the Hung-shui Ho.

Authorities: Maritime Customs Reports; *China Sea Pilot*; A. R. Colquhoun, *Across Chrysê*, &c.

General Description

The **West River** (Si Kiang) and its tributaries drain the western half of Kwangtung, the whole of Kwangsi, and the south-western parts of Kweichow, besides a portion of the province of Yunnan. Its total length from its furthest source in Yunnan to the sea is estimated at about 1,200 miles, of which the last 188 miles lie within the province of Kwangtung. Strictly speaking the name Si Kiang or Sai Kong (its literary name is Yüan Kiang or Drake River) is only applicable to its lower stretches from Sünchow to the sea. Above Sünchow it divides into two main branches—the Pak Ho (North River) or Hung-shui Ho and the Yu Kiang.

A detailed description of its course from the Motomoon to Samshui, from Samshui to Wuchow, and from Wuchow to Nanning will be found elsewhere; see pp. 168–170, and Routes 48, 51.

The country traversed by it above Samshui is on the whole mountainous, picturesque, and wild, but broken by small areas of cultivated land on the borders of the river. The population on its banks is rather sparse, and many of the towns which it passes have a decayed appearance, largely due to the ravages of the T'ai-p'ing Rebellion in the middle of the nineteenth century. It is, however, a great and busy waterway; and in spite of difficulties of navigation, piracy, and imposts, it remains the main artery of trade in Kwangtung and Kwangsi.

Character of the River

The volume of the river is great in Kwangtung, and it is already ¾ mile wide at Wuchow, but its width decreases lower down in passing through the gorges below and above Shuihing, and its navigability is affected by several shallows and rapids. It is, moreover, subject to great variations in depth during the different seasons. Thus at Wuchow, where its normal summer rise is about 50 ft., since 1897 its depth has varied from about 3 ft. below zero in the dry season to over 70 ft. above zero in the season of flood, and it has been known to rise as much as 56 ft. in six days. At Samshui in June 1914 it rose to 25 ft. 9 in. above zero, a record which has since been surpassed. A 60 ft. rise has been recorded at Nanning, though the normal variation between summer and winter depths at this city is only 24 ft. In normal times the tide is felt for about 200 miles from its mouth, the rise at Wuchow being 1 to 1½ ft. The current in winter averages 1¼ knots, but increases to 5 and 8 knots in flood time. Low-river period extends from the beginning of December to the middle of March, after which the river rises rapidly, attaining its maximum height in July, and gradually falls from the end of September.

Navigability

The navigability of the West River is proportionately affected by the above conditions; and it has been said that there is ample depth for an ocean-going vessel as far as Wuchow in high-river season, while at low water the tender of the same vessel could only ascend to that point with difficulty. Between Wuchow and the sea the shoalest places are at Second Bar (20 miles below Wuchow) and at three other spots between that town and Second Bar, where there is only 7 ft. of water when the river is at zero. There is a regular service of suitable river steamers between Hongkong, Macao, Canton, and Wuchow at all seasons, and launches and junks ply continuously along this course.

Above Wuchow the West River is easily navigable for light-

draught vessels as far as Sünchow (120 miles), above which the rapids on the Yu Kiang are a formidable obstacle. Navigation to Nanning by the Yu Kiang, 248 miles further, is regularly carried on by vessels of 4 ft. draught between April and December, and by boats and launches of 1½ ft. draught in the remaining months.

Above Nanning shallow-draught launches and native junks ply regularly to Poseh on the borders of Yunnan, a distance of about 285 miles, and smaller craft go to Poyai, 30 miles beyond, while sampans can reach Silin.

The Tso Kiang, a branch of the Yu Kiang, is navigable by shallow-draught launches as far as Lungchow, 231 miles above Nanning, for 4 months of the high-water season, and for vessels drawing 1 ft. or less at other times. Sampans and rafts are carried by this stream above Lungchow into Tonkin.

With regard to the Hung-shui Ho little is known ; but it was navigated in June 1910 by a river gunboat drawing 3 ft. as far as San-kiang-k'ou, 72 miles above Sünchow, and the gunboat then continued its journey up the Liu Kiang to Liu-chowfu, a further distance of 103 miles. The Liu Kiang, an important tributary coming in from the north, is navigable by small junks as far as Ta-ch'ang-an, south of Hwaiyüanhsien, and is said to be used by sampans as far as Sankiao in Kwei-chow.

The Course of the River

Motomoon to Samshui Reach, 65½ miles. For detailed description see pp. 168–170. From the sea at Motomoon to Samshui Reach the West River passes in a northerly direction along the western fringe of the Canton delta, through a rich and populous country, which consists mainly of flat alluvial land with a few groups of hills above Kongmoon. The banks are studded with villages and towns, among which the most important are Kunchuk (mile 40½) and Kowkong (mile 42½), while at mile 26 a creek runs off south to the treaty port of Kongmoon (see *Gazetteer*). Samshui Reach runs north-east to the treaty port of Samshui (see *Gazetteer*) about 2 miles

distant, just below which it receives the waters of the North River (see p. 102).

Samshui Reach to Wuchow, 131½ miles: see Route 48. The West River now bends due west and pursues a winding course in a westerly direction to Wuchow, which lies 4 miles within the boundary of Kwangsi. At Tsingki (mile 3) it receives a canal on the north bank, which connects it with the Bamboo River. After passing the island of Kwangli the river makes a loop southward with gorges at either end. The famous Ling-yang, or Shiuhing Gorge, entered at mile 17½, extends for over 4 miles, and the channel narrows to about 250 yds. as it passes between precipitous hills rising to 2,800 ft. Shiuhing (see *Gazetteer*) is passed at mile 28½ on the north bank, and opposite to it the Sunhing River comes in from the south-west (see Route 48, mile 29½). Fifty-six miles further up is the town of Takhing (see *Gazetteer*), below which the Nam Kiang comes in from Lotingchow from the south-west. Dosing is passed at mile 104, and 3 miles beyond Fungchünyün (mile 119) the Fo-kong River flows in from Hotsing in the north. This river was navigated by a gunboat of 2 ft. 8 in. draught for 36 miles in July 1903. At Wuchow the West River receives on its north side an important tributary, the Kuei River or Fu Ho, which is navigable by junks as far as Kweilin, capital of Kwangsi, a distance of about 220 miles, and is connected further up by canal with the Siang River which flows into the Yangtse.

Wuchow to Sünchow, about 120 miles: see Route 51. The river winds westward to Konghow (107 miles) and then makes a sharp bend south-west to Sünchow, where it receives the northern branch (Hung-shui Ho or Pak Ho) coming in from the north-west. A connecting stream joins the top of the fork at Konghow, the three rivers enclosing a roughly equilateral triangle with sides some 13 miles long. At Tengyün, 32 miles above Wuchow, a large tributary comes in from Junghsien in the south-west.

Sünchow to Nanning, about 248 miles: see Route 51. The southern main branch of the West River, called the

Yu Kiang, leads in a southerly direction for some distance from Sünchow and then winds south-west past Kweihsien, 60 miles distant. Above Kweihsien is a series of rapids, including the Great Rapid, the principal obstacle in this section of the river. At Hengchow (mile 132) the river bends almost due west past Namheung, from which a route leads to Pakhoi on the coast of Kwangtung. Beyond Namheung it turns north-west past Wingtsun, and then winds in a westerly direction to the treaty port of Nanning.

Nanning to Poseh, 285 miles. The Yu Kiang continues its winding course westward for about 30 miles to San-kiang-k'ou, where it receives the waters of the Tso Kiang from the south-west. At this point it bends north-west through hilly country with numerous gorges and rapids. There are few towns of any size on its banks, the most important being the passenger stages of Lunganhsien, P.T., at mile 113, Siayenhü, P., at mile 123, Enlung, P., at mile 188, Fengi, P., at mile 218, and Napo, P., at mile 227. Between Poseh and Nanning the river drops 500 ft., and there are 40 rapids, the worst of which are the Kam-ling, about 30 miles above Nanning, and the Lai-kwat and Ta-yu near Poseh. Above Enlung the country opens out and the river is often $\frac{1}{4}$ mile wide, but as it broadens, sandy shoals and banks form a serious obstacle in the channel.

Poseh to headwaters. A short distance above Poseh, which is situated close to the frontier of Yunnan, the river runs along a mountain valley, and has all the character of a highland stream with many windings and frequent rapids, there being a fall of 500 ft. in the first 30 miles. It still averages 150 yds. in width, and is used by small junks for some 30 miles to Poyai, P.T., within the borders of Yunnan. Above this place the river divides, one branch leading northward past Silin and the other westwards to its source in Yunnan, in the district Kwangnanfu.

The Tso Kiang

The southern branch of the Yu Kiang, which joins the latter at San-kiang-k'ou, about 30 miles above Nanning, is called the

Tso Kiang. It trends south-west to the borders of Tonkin. Its width at the mouth is about 200 yds., but it is shallow and broken by numerous rapids, the most formidable of which are the Laipieh and Washek. On its banks are the towns of Sinningchow, P. (mile 62 from Nanning), Tolu, P.T. (mile 82), Taipingfu, P.T. (mile 146), all of which are ports of call, and the treaty port of Lungchow, which is 231 miles above Lungchow. Between Taipingfu and Lungchow it receives the Ka-yun Kiang from the north-west and the Ming Kiang from the south-east. At Lungchow, about 20 miles from the Tonkin frontier, it splits into two branches, the northern running north-west past Kao-bang in Tonkin into Yunnan, and the southern rising in Tonkin in the Bak-kan district.

The Hung-shui Ho

Branching north from Sünchow and then trending north-west the Hung-shui Ho or Pak Ho, the northern main branch of the West River, reaches Yunnan along the northern border of Kwangsi. It passes the town of Wu-hsüan at mile 45, and at San-chiang-k'ou (mile 72) it receives the important tributary, the Liu Kiang, which comes in on the north side from Liu-chowfu (mile 175). The Liu Kiang, which crosses Kwangsi from the north and rises in Kweichow, is an important river, and with its tributaries drains a large part of the province of Kwangsi. From San-chiang-k'ou the Hung-shui River winds north-westward to the border of Kweichow, which it follows in a westerly direction for some 180 miles to Yunnan, receiving two large tributaries, the Po-pe Kiang and the Pe-pan Kiang, from the north. In Yunnan, under the name of Ta Ho, it winds south-west to Amichow, and apparently rises in a lake west of that town in the neighbourhood of Linanfu. But little is known of the Hung-shui beyond the confluence of the Liu Kiang, and its navigability has not been studied.

CHAPTER VIII

OTHER RIVERS AND WATERWAYS

The North River—the East River—the Han River—Other Rivers

The North River

Authorities: Maritime Customs; *China Sea Pilot*; Henry, *Ling-Nam*; Military Report:—G. E. Pereira, R. M. Crosse, R.A. and Blagrove.

The North River, or Pak Kong (Pei Chiang) and its tributaries drain the north and north-western parts of Kwangtung. Its upper waters are divided into two main streams: (1) the Tsêng Shui, which rises in the Mei-ling Pass and flows south-west, and (2) the Wu Shui, which rises in Hunan and flows south-east. These two branches unite at Shiuchow and flow south to Samshui, where a short reach links the North River with the West River. The total length of the North River is approximately 280 miles; and it has for centuries been the highway of commerce between Canton and the provinces of Hunan and Kiangsi, though it is likely to be in the future largely superseded by the Yüeh-Han Railway.

Up to Tsingyün, about 51 miles from Samshui, it has an average width of ¾ mile, and flows through flat, fertile, and well-populated country. Above Tsingyün it narrows to ½ mile, and then to 300 yds. as it enters the gorges. Above Wongshek, mile 75½, its width is only from 100 to 300 yds., and the surrounding country is hilly with open intervals. On the whole the country above Tsingyün is not productive, though there is good grazing ground in the neighbourhood of Shiuchow. Above Shiuchow the Tsêng Shui varies from 150 to 50 yds. in width, and flows through rolling country with patches of cultivation and some timber (mostly pine) in the neighbourhood of Namyung: while the Wu Shui flows through wild

mountainous country with heavily-wooded gorges above Lok-chong, its width varying from 250 to 100 yds.

Depth, navigability, currents, &c. The North River is on the whole shallow, and its navigability is partly dependent on the rainfall. Below Yingtak (mile 100) there are no difficulties, and steam-launches drawing 4 ft. can reach Tsingyün for 7 months in the year and Yingtak for 5 months (May to September). Above Yingtak the river becomes narrow and intricate, with many shallows and rapids, and frequently shifting banks of sand and gravel. April, May, and June are the only months in which a vessel of 2½ ft. draught could depend on reaching Shiuchow.

Above Shiuchow the Tsêng Shui is shallow and navigated by shallow junks to Namyung, to which place river gunboats could ascend in May or June ; while the Wu Shui, with its frequent rapids and shallows (of not more than 2 ft. at low water), is ascended with difficulty by light-draught boats as far as Pingshek.

The river as a whole is liable to rapid rises in the flood season, when the depth is increased by as much as 20 ft. in places, and there are occasional freshets in the spring. At low-water season the current below Tsingyün averages 1 to 1½ knots : above that point it increases to 2 or 3 knots, with considerably greater speed at the rapids. The rise of the North River is not so great as that of the West River, and in the height of the rainy season the current at Samshui is often reversed.

Between the hours of 12 and 4 p.m. a breeze from the south may generally be expected on the North River. This is of great assistance, changing the speed of sampans from 1½ knots to 4 or even 5 knots per hour on suitable reaches.

Samshui to Tsingyün, 51 miles. The general direction is north. At mile 6¾ the Sui Kiang or Bamboo River comes in from the north-west. The Sui Kiang (see Route 47) is the second largest tributary of the North River, and rises in Kwangsi. Its length is about 100 miles, and for 50 miles above Szewui its banks are fringed by continuous bamboo groves. Its

width varies from 200 to 500 yds. in its lower course, but the channel is narrow and impeded by sandbanks. It is navigable by launches as far as Szewui (see *Gazetteer*), about 25 miles from its mouth, having a general depth not exceeding 4 ft., and a current of about 4 miles per hour ; and ordinary river boats of the *ho-t'au* type ascend to Waitsap in Kwangsi, about 82 miles, while sampans go a further 12 miles to Liangtsun. Below Szewui the adjoining country is flat and well cultivated, and the hills lie far back from the banks of the river, which vary from 8 to 20 ft. in height. Above Szewui the country is mountainous, and rapids are frequent above the border of Kwangsi. About 11 miles from its mouth the Tsingki Canal, on the south side, connects it with the West River.

At mile 17 of the North River is Lupao on the left bank, where the Lupao creek (see Route 42) connects the North River with the Canton River. Shekkok, at mile 37½, is an important town on the left bank. At Tsingyün on the right bank (see *Gazetteer*) the river makes a sharp bend eastward.

Tsingyün to Yingtak, 47 miles. At mile 63 the river enters the picturesque Fi-loi-ze Gorge, which extends for about 3 miles. Here the river contracts to about 300 yds., and describes a semi-circle northward between abrupt hills which rise to 700 ft. At Pakonghow, mile 66½, the Yüeh–Han railway approaches the river and keeps close to its left bank ; and the Pa Kong comes in from the north-east from Fat-kongting.

At Konghau, mile 88½, the Linchow River comes in from the north-west. The Linchow River is about 120 miles long and rises on the Kwangtung–Hunan border. It flows through hilly wooded country with open intervals. Its width varies from 250 to 100 yds., and its course is broken by numerous rapids. Boats of 2 ft. draught ascend to Linchow, some 98 miles, and smaller craft go on to Singtsz, some 32 miles further. There are several gorges between Konghau and Yingtak (see *Gazetteer*).

Yingtak to Shiuchow, 62 miles. Opposite Yingtak the Yung-yün River comes in from the north-east from Yungyün in the

Hakka district. It is impeded by rapids and only navigable by small boats. At mile 114 the Kun-yem Shan is passed on the left, celebrated for its caves and the temple of Kuan-yin. There are several small tributaries on either side in this section, the largest of which is the Lung Shui, which comes in from Yüyüan on the north-west about mile 146. Shiuchow (see *Gazetteer*) is at the junction of the Tsêng Shui and the Wu Shui.

The Tsêng Shui. This branch of the North River, about 90 miles long, rises in the Mei-ling Pass on the Kwangtung–Kiangsi border and flows in a south-westerly direction. Its width varies from 50 to 150 yds., and it is navigable by shallow-draught junks as far as Namyung (see *Gazetteer*), about 70 miles up. It is crossed on an important bridge by the Yüeh–Han Railway, about a mile north-east of Shiuchow; and it receives several tributaries on both banks.

The Wu Shui rises near Linwu in Hunan and flows in a south-easterly direction to Shiuchow. Its average width is 250 to 100 yds., and it is navigated by light junks to Lokchong, about 35 miles, and by smaller boats with difficulty to Pingshek about 40 miles beyond, and by its tributary, the Chang Shui, for some 20 miles further to Ichang Hun (see *Gazetteer*). Above Lokchong it runs for 25 miles through a wild and picturesque gorge, between abrupt and densely wooded hills rising to 1,200 ft., and over a series of rapids. One of its upper branches, which leaves the left bank below Pingshek, runs through the Che-ling Pass into Hunan.

The East River

Authorities: Maritime Customs Reports: *China Sea Pilot*: Henry, *Ling-Nam*: Military Report: J. de L. Simonds and F. W. Thicknesse.

The **East River** with its tributaries drains a large portion of central and eastern Kwangtung. It rises in Kiangsi, in the Kiu-ling Shan south of Anyüan, and flows south to the Kwangtung border. Here it winds eastwards for a few miles and then bends south-south-west to Wanglik, about 18 miles

east of Waichow, where it takes a sharp bend westward and winds with a westerly course to Sheklung. At Sheklung it divides into the two streams forming the north and south arms of the East River Delta, through which it reaches the Canton River. Its total length is approximately 290 miles of which 46 are in Kiangsi. It is on the whole a broad, shallow stream and its navigability is much affected by the rainfall, which causes rapid changes in the river level. The channel in places is much impeded by sandbanks and the current is swift. The traffic above Sheklung is mainly carried on by light-draught junks ; but launches drawing 3½ to 4 ft. ply from Sheklung to Waichow at all seasons and under favourable circumstances to Hoyün in the summer. Light junks go regularly to Lungchün, and it is said that they can reach Hopeng on one of the upper branches. Sampans are said to go as far as the Kiangsi border. The width of the river varies from 650 to 300 yds. up to Hoyün and from 250 to 100 yds. between Hoyün and Lungchün. The immediately adjoining country for this distance is mostly flat, and the river banks are about 10 ft. high ; but above Hoyün it becomes more hilly. The rise in the rainy season is from 3 to 5 ft. ; and the tide, which has a rise of 1 ft. at Sheklung, is said to be felt as far as Hoyün. The average current between Waichow and Hoyün is 2 knots and between Hoyün and Lungchün 3 knots ; but it increases considerably in speed during the rains. The water of the river is a clay-brown colour and slightly ferruginous. See Routes 22 and 23.

East River Delta.—All the creeks which flow into the east side of the Canton River between Davis Island and Chuen-pi, a distance of some 24 miles, are connected with the East River delta system ; but the delta proper may be said to lie between Junk Passage on the north and the Sawshi Channel or Tungkun River on the south, a space of about 15 miles along the Canton River. The apex of the delta is at Sheklung (about 25 miles from the mouth of Junk Passage), where the East River and the Tungkun River unite. Junk Passage, as the nearest line of approach from Canton, is the entrance commonly

used by launches and junks; it is 4 miles long but is only 30 yds. wide, with a minimum depth of 2 ft. at low water. The main entrance is Escape Creek which meets Junk Passage at the north-eastern corner of Davis Island. It is about 5 miles long and in 1908 was used by vessels of 8 ft. draught at all tides. Farther south Second Bar Creek and Junction Creek lead into the East River above Suntong; but they have bars with a low water depth of 3 and 4 ft. respectively. Junction Creek joins the Tungkun River a short distance above its mouth; and the latter is navigable for launches up to Tungkun (see *Gazetteer*); but beyond that it is shallow, and junks can only pass along it to Sheklung during the summer floods. The delta country is flat, alluvial land, richly cultivated and thickly peopled. The head of it is crossed by the Canton–Kowloon Railway at Sheklung (see *Gazetteer*). For the East River up to Sheklung see Route 34.

Sheklung to Waichow, 54 miles. The river winds through flat country, passing the town of Poklo (see *Gazetteer*) 11½ miles from Waichow. At Sheklung the Lungmoonyün River comes in from the north-east through several mouths. It rises in the Tit-kong Mountains and is navigable by shallow junks to Lungmoonyün, though the upper part of its course is rendered difficult by rapids. Small boats go up some distance further to Tit-kong. About 5 miles from its mouth is the town of Shektan and about 7 miles farther up the district city of Tsengshinghsien.

At Waichow (see *Gazeteeer*) the Samtohü River comes in from the east. It is about 100 yds. wide and navigable by junks of 2 ft. draught to Samtohü (see Route 17) a distance of about 64 miles. At mile 15 it is joined by the Tamshuihü River which flows in from the south and is navigable by shallow-draught boats to Tamshuihü (26 miles; see Route 18) and with difficulty to Lungkonghü 15 miles farther. The average width of the East River in this stage is 500 yds. and the average depth 5 ft.; but the channel is only about 30 yds. wide.

Waichow to Lungchün, 113½ miles. Above Waichow the

river bends slightly north-east and at Wanglik, about 18 miles up, it takes a sharp bend north-west and then returns to its direction from the north-east. At mile 42 it receives a tributary on the left bank which comes in from Wingon in the north-east. At mile 72 is Hoyün (see *Gazetteer*) just above which a large tributary flows in from the north-west from the Set-tung Mountains. This is the Sin-fung Kong or Lo-man Shui, which is about 200 ft. wide and flows through mountainous country. Its upper waters are divided, one branch coming in from Chongning in the west and the other from Linpingchow in the north. It is navigable to Chongning and also, it is said, to Linpingchow. The channel of the East River in this stage is more uniform and is navigable for small junks drawing 3 ft. Between Waichow and Hoyün the river is widest with an average breadth of 650 yds.

Above Lungchün. Little is known of the river above Lungchün. At Tung-shui it divides, one branch coming in from the north-west and rising on the Kwangtung boundary. This branch passes the town of Hopeng, about 30 miles above Lungchün, to which place it is said to be navigable by light-draught junks. The other branch winds across the Kwangtung border and bends northward into Kiangsi, to its source in the neighbourhood of Anyüan.

The Han River

Authorities: Maritime Customs Reports: Official Guide: Military Reports: J. de L. Simonds and F. W. Thicknesse.

The **Han River** rises in the Ta-chin mountains in the Tingchou-fu district of Fukien. Flowing southwards it crosses the Kwangtung border at Shak-ha-pa and empties itself into the sea through a large delta in the neighbourhood of Swatow. Together with its tributaries it drains eastern Kwangtung, providing waterways for the trade of the district besides communication with the province of Fukien. Its total length is estimated at 240 miles, and above Chaochowfu it is commonly known as the Ta Ho. It has numerous small

affluents but only one important tributary, the Mei River which joins the right bank at Samhopa about 95 miles from the sea. Above Chaochowfu its current is swift averaging 3 knots per hour.

The Han River is navigable by shallow-draught junks of 12 to 30 tons as far as Shak-ha-pa, on the Kwangtung border. From this point for about 3 miles it is not navigable, and goods have to be carried overland to Fengshih where navigation is resumed by small craft which ascend to Tingchowfu. Launches ply between Chaochowfu and Samhopa, but there are shallows and rapids which make navigation uncertain when the water is low. The types of native boat used on the Han River are chiefly the sailing junk and the 'paper boat'; see p. 70.

The Han River Delta is some 24 miles deep and 18 miles wide across the base. It is threaded by numerous creeks, but their navigability is uncertain and the sea-board is fronted by shallows except on the south side along Swatow Harbour. The country is flat and alluvial, and has the usual delta characteristics being well-cultivated and populous. The most important channel is that which connects the treaty port of Swatow with Chaochowfu (see *Gazetteer*) 30 miles up stream and at the head of the delta; but it is shallow and only navigable by flat-bottomed junks. The current in this stretch is slow.

Chaochowfu to Samhopa, 65 miles. In this section the river varies in width from 100 to 500 yds., averaging 100 to 300 yds. Its depth is said to average 6 to 8 ft., and its current is swift. The adjoining country for 5 miles above Chaochowfu is flat and open, and here the river has its greatest width. Beyond this point the hills close in upon it, but open out again in the plain of Liuwong, 20 miles up. Above Liuwong the country is hilly and wooded with pine and bamboo.

At Samhopa the Han River is joined by the Mei Kiang, a large and important river. The Mei River trends north-west for a few miles and then assumes a south-westerly direction as far as Hohow, 83 miles from its mouth. Here it divides,

one branch winding in a north-westerly direction to Chonglok where it turns north to its source near the Kwangtung border. The other branch continues south and south-west rising in the district south of Wingon. From Samhopa to Kaying (mile 39) the Mei River varies in width from 40 to 120 yds., with an average depth of 4½ ft. and a current of 2½ to 3½ knots, running through well-wooded hills. From Kaying to Hokow the country is more open and the river varies from 100 to 300 yds. in width with a current of 2 to 3 knots, but its average depth is reduced to 2 ft., and rapids obstruct navigation in the dry season. Above Hokow the north-westerly branch has a width of 30 to 40 yds. and a depth of 2 to 3 ft.; and it is navigable by flat-bottomed junks of the 'paper-boat' type (see p. 70) to this town. Above Chonglok it is practically a mountain torrent and is only navigated with difficulty by shallow sampans. See Routes 25 and 29).

Samhopa to Shaka-ha-pa, about 25 miles. Up to Taipuhsien, a distance of about 10 miles (see Route 27), the Han River is 150 yds. wide with an average depth of 4½ ft. and a current of 2½ knots. It runs through banks about 12 ft. high. Above Taipuhsien no details are available.

Other Rivers

In addition to the four principal rivers of Kwangtung and their tributaries there are numerous minor rivers capable of carrying various degrees of boat traffic and useful to local trade. Of these the best known are the following:

The Kityang River flows into the Swatow estuary where it is joined by the south-western arms of the Han River delta. About 16 miles above Swatow it divides into two branches, the Pak K'ai which comes in from the Fungshun district and the Nam K'ai which comes in from the south-west. Up to Kityang which is situated between the two branches about 29 miles above Swatow there is a deep channel available for junks and launches. Above Kityang the Nam K'ai averages 100 yds. in width, but is shallow. Its depth in the low-water season is only 2 ft., though in the rainy season it has a rise of

from 7 to 10 ft. The current at low water is about 1 mile per hour; and there are no rapids and few difficulties in navigation for light-draught boats which ascend at least as far as Hopo (Route 33), about 45 miles above Kityang. No information is available about the Pak K'ai.

The Lengkang River flows into the sea south of Hweilaihsien. It has a south-easterly course through hilly country and is subject to sudden rises after heavy rain. It is navigated by boats of 1-ft. draught for 29 miles to Kweitam (see Route 5 and *Gazetteer*). Its width varies from 100 ft. at Kweitam to 300 yds. at its mouth and its depth from 6 to 2 ft.

The Paknai River is one of the upper branches of the Canton River and is said to have been formerly the main channel of the North River, before the latter was diverted into its present bed below Shekkok. At present it flows from the neighbourhood of Shekkok south-east and then south to Canton. It is navigable as far as Paknai N., about 33 miles above Canton (see Route 41). At mile 18 it receives a tributary on the left bank which comes in from Fayünshing; and at mile $11\frac{1}{4}$ it is joined on the left bank by the Tsungfa River. The Lupao Creek (Route 42) joins it on the right at mile 10.

The Tsungfa River, about 100 miles in length, flows through the Tsungfa district in a south-westerly direction and joins the Paknai River $11\frac{1}{4}$ miles above Canton. It is a broad stream and originally very shallow, but its navigability has been improved by numerous dams of which there are said to be 137 below Tsungfa. Long, narrow boats, specially suited to the conditions of the river, are used up to Tsungfa about 48 miles from its mouth. Above Tsungfa navigation is difficult and is confined to very light craft which ascend to Leunghowhü about 20 miles further. The river flows through a rich and fertile valley with numerous towns and villages. About 23 miles from its mouth a small affluent comes in from Fayünshing in the north; and at Kongtsun $4\frac{1}{2}$ miles from its mouth it is crossed by the Yüeh–Han railway.

The Tam Kong or Sunchong River rises in the Yanping

district and flows due west into the Ngaimoon just below Sunwui. It is sometimes called the South-west River. It is a large deep river capable of carrying sea-going junks as far as Sunchong 29 miles from the mouth ; and in the high-water season large vessels could reach Kungyifow 6 miles lower down. Above Sunchong the river divides into several branches which are comparatively shallow ; and the Yanping branch is only navigable for small craft up to that town.

The Mak-yeung River rises in the mountains south of Lotingchow and flows south entering the sea just below Yeungkong. It flows through hilly and picturesque country and is said to be navigable (presumably by light craft) as far as Wongnaiwan about 58 miles from the sea. Fifteen miles below this it passes the town of Yeungchun ; and 3 miles from its mouth is Yeungkong an important seaport for native trade. Just below Yeungkong it receives on its left bank the Nalung River which flows in from the north and is navigable by small craft as far as Nalung in the Yanping district.

The Kochow River, called in some Chinese maps Fao-shan Shui (Fou-shan Shui), rises just beyond the Kwangsi border and flows southward into the sea east of Kwangchowwan. It receives two large tributaries, one at Fachow which comes in from the Kwangsi border on the north-west and is sometimes called the Fachow River ; and the other, the Kam Kiang, which comes in from the north-east close to Muiluk. Junks of 4 ft. draught can ascend the estuary to Hwangpo about 10 miles up ; and thence to Kochow navigation is confined to boats of $1\frac{1}{2}$ to 2 ft. draught with a capacity of about 2 tons. A number of these vessels ply between Kochow, Fachow and Muiluk, though navigation is sometimes interrupted by lack of water in the dry season. The Fachow River is not navigable, but it is used for floating down timber from the Kwangsi border. No information is available about the Kam Kiang.

The Mon-tao River, or Matshe, which flows into Kwangchowwan from the north is navigable by large junks as far as

Che-kam (10 miles); and 60-ton junks can reach Mon-tao (20½ miles). Above that point sampans ascend to Suikia in a westerly direction.

The Kap-shui River rises in the mountains south-east of Watlam and flows into the north-east corner of the Gulf of Tonkin. It is said to be navigable for about 60 miles by boats of 1½-ft. draught all the year round and by boats of 3-ft. draught in the summer months.

The Limchow River, called in some Chinese maps the Lo-ch'êng Kiang, rises in the mountains north of Watlam and flows south-west into Pakhoi Bay. It is used by junks and launches up to Limchowfu, about 6 miles from its mouth, and by shallow draught cargo boats as far as Shuenfow about 133 miles farther. From Pokpak (126 miles up) it averages about 200 yds. in width; but there are numerous rapids above Limchowfu which impede navigation in the dry season. About 15 miles above Limchowfu it is joined by the Moli River which flows in from the north. Cargo boats ascend this tributary as far as Moli about 35 miles from its mouth.

The Yamchow River, or Kiu Kiang, rises near Lingshan and flows in a south-westerly direction into the Gulf of Tonkin. It is about 120 miles in length and at Yamchow has a width of some 60 yds. Vessels of 12-ft. draught can ascend to Lung-mên, 12 miles from the mouth; and junks of 60 to 90 tons burden go up to Yamchow a further 30 miles. Above that city it is said to be navigated by light-draught boats, but no detailed information is available.

CHAPTER IX

OTHER INLAND COMMUNICATIONS

Roads—Bridges and Ferries—Telegraphs—Wireless—Posts

Roads

In Kwangtung there are few roads passable for wheeled transport, except as noted at the end of this section.

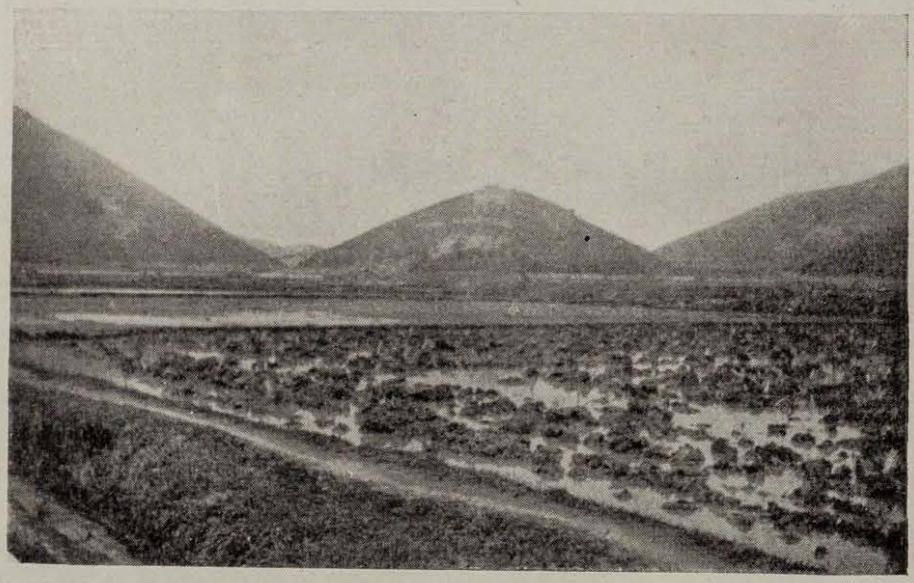
The usual means of communication overland is by footpaths just wide enough for traffic in single file; and these are paved with stone slabs, or sometimes cobbled in places where the route is a much used one between important points. Paving is more common in the south-eastern and north-eastern parts of Kwangtung where granite is plentiful; it can hardly be called an advantage, as the paving soon gets uneven, is slippery in wet, and trying to the feet in dry, weather.

In the vicinity of villages and towns these paths often broaden out into lanes to accommodate the larger amount of traffic and the passage of carts to and from the fields; but once away from the immediate neighbourhood of habitations the road at once becomes a footpath. Along the river banks there is generally a tow-path, but this is not always the case, and on the higher reaches of the West and North Rivers it is frequently impossible to follow the banks, owing to the thick jungle or the presence of cliffs rising straight out of the water.

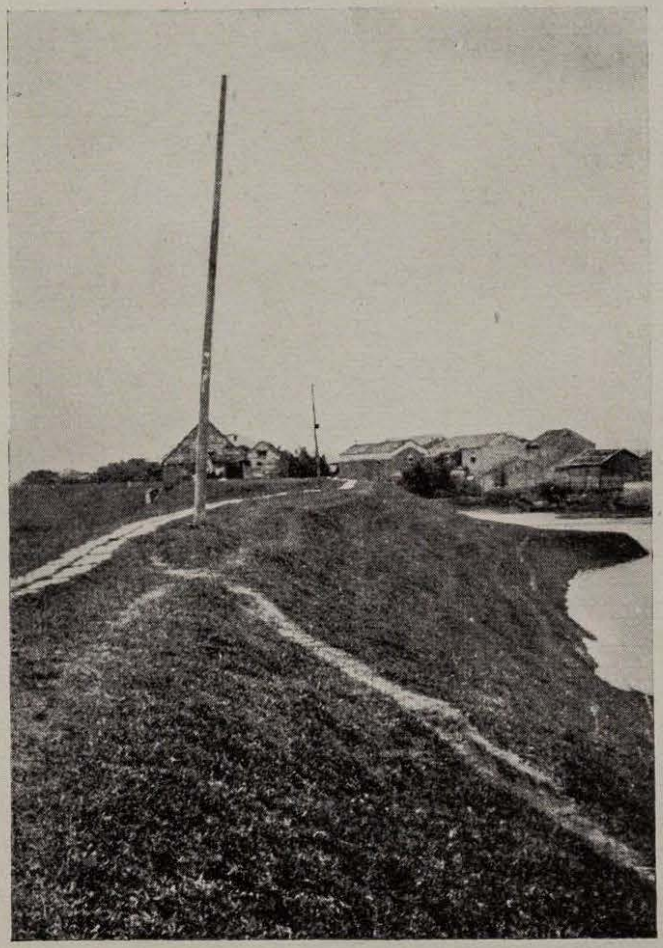
In districts devoted to the cultivation of rice, the paths follow the bunds which form the boundaries of the paddy-fields. The bunds are generally from 1 to 3 ft. wide and are raised 2 to 5 ft. above the level of the fields.



TOWPATH ON WEST RIVER



PADDY BUND



ROAD ON DYKE
Samshui district

Proposals have been made for the construction of broad roads in the province ; up to April 1914 the following roads of over 15 ft. in breadth only had been made :

(1)	From Canton to In-t'ong . .	4 miles.
(2)	„ „ Saitsün . . .	3 „
(3)	From Pakhoi to Limchowfu . .	16 „
(4)	From Limchowfu eastwards . .	19 „

These roads are good, and capable of carrying wheeled traffic up to one ton.

Bridges and Ferries

Near villages and towns, streams and nullahs are almost invariably bridged, if fairly large, with substantial stone bridges of one or more arches ; in such cases the roadway will be 6 to 8 ft. broad, and the span 20 ft. to 80 ft. If the river is small, the bridge usually consists of granite slabs or wooden planks supported on stone or wood piers or trestles ; the width of the bridge is from 2 to 5 ft. and the maximum span 15 ft. The larger rivers are sometimes crossed by bridges of boats, which are as a rule temporary. They are generally arranged so that 2 or 3 boats can be removed to permit the passage of traffic. The bridges are usually removed at high-water periods, the boats being used as ferries.

In the more mountainous districts, trestle bridges of fir are frequently met with. They are only strong enough to take men in file.

No bridge should be assumed to be capable of taking wheeled traffic in the absence of specific information. Where wheelbarrows are mentioned, however, in the description of the routes it may be assumed that the bridges therein noted will carry them with their proper loads.

Rivers of 100 yds. in width and over are as a rule crossed by ferries, which are found at most villages and points where important tracks meet the river. A ferry commonly consists of one or two boats, but sometimes as many as 6 are found.

The boats are from 18 to 24 ft. in length and 6 ft. beam. The ferry charge is about 2 cash (1/20 of a penny) a head, unless the river is very broad.

Telegraphs

Land lines.—There are five main telegraph lines through Kwangtung, all meeting at Canton :

(1) From Canton following the course of the West River, to Wuchow ; thence through Kwangsi and Yunnan into Burma.

(2) From Canton south-westwards, following generally the line of the coast through Kochow and Limchowfu into Tonkin at Moncay.

(3) From Canton eastwards through Sheklung and Waichow to Swatow ; thence into Fukien at Amoy and Foochow.

(4) From Canton up the North River over the Mei-ling Pass into Kiangsi.

(5) Canton to Hongkong via the Railway.

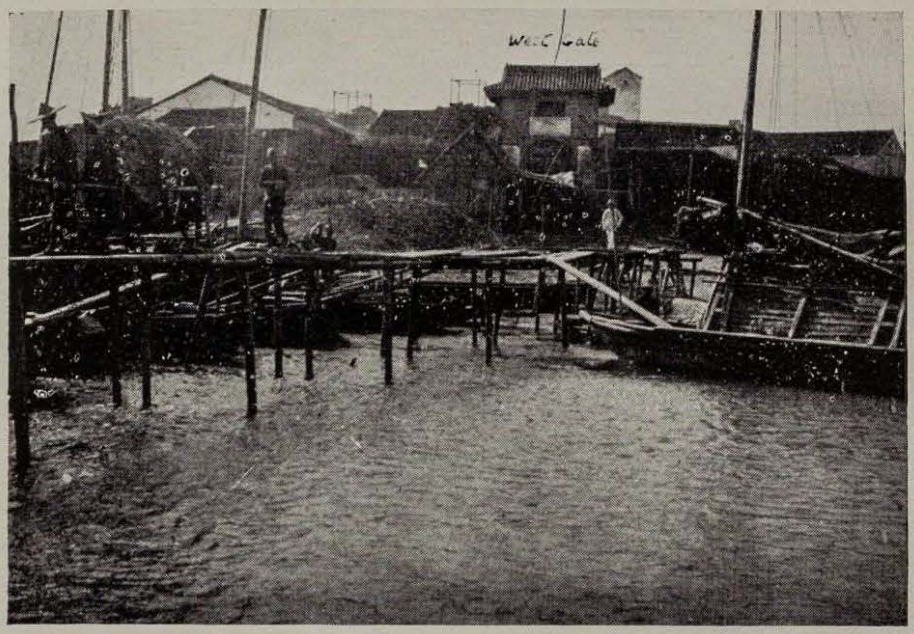
Branches from these lines connect with most of the important towns in the province : see the list of post offices in Kwangtung on pp. 704–726.

Morse instruments are employed, and the signalling is done in Morse. Chinese messages are sent by a system of numbers, each character being represented by a number in a code book ; messages written in Chinese are changed into numbers by the clerk, signalled as such and translated back into characters by the receiving clerk. Secret messages are signalled by changing the numbers signalled in prearranged ways.

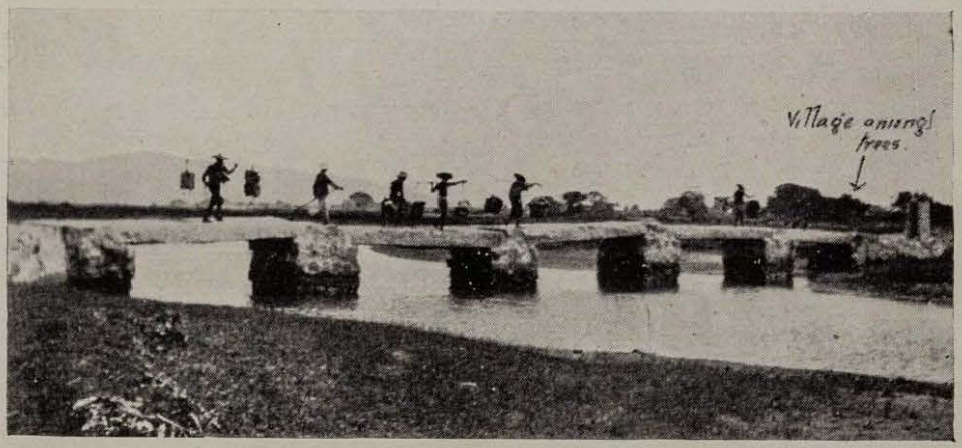
All instruments are self-recording, and the messages are received on tapes in Morse.

Cable.—The Eastern Extension, Australasia, and China Telegraph Company owns a submarine cable from Victoria, Hongkong, to the mainland in the neighbourhood of Kowloon.

Wireless.—There is a wireless station for public service at Canton outside the East Gate with normal range of 650 miles by day and 1,300 by night. Telefunken system.



TAMSHUIHÜ BRIDGE



STONE-SLAB BRIDGE WITH CARRIERS

In connexion with the river defences low-power stations have been erected at the following points in the delta :

Tsinshan, north of Macao	range 60 miles.	Hung-cheung Co.
Fu-mun	,, 60 ,,	Telefunken.
Fa-ti [1]	,, 200 ,,	Hung-cheung Co.
Canton, on the bund near South Gate	,, 200 ,,	Telefunken.
Canton, over Admiralty Buildings	,, 300 ,,	,,
Ma-how, about 5 miles south of Samshui	,, 60 ,,	,,

Seven of the Canton river gun-boats are fitted with short-range wireless to communicate with these stations.

There is a wireless at In-t'ong camp, and the civil governor of Canton is stated to have a private installation at his yamen. It was stated that in March 1915 a wireless plant was being installed near the North Gate.

At Hongkong in addition to the installation under the Colonial Post Office there is a naval and military wireless station on Stonecutter's Island.

At the end of 1914 a wireless station was being installed $1\frac{1}{3}$ miles north-east of Tai-p'ang-shing, in Bias Bay.

The short-range wireless installation at Hoihow, in Hainan, communicating with a station near Süwenyun on the mainland was dismantled in 1914.

The projected system of coastal stations similar to the public service at Canton which the Chinese Government propose to erect, includes an installation at Swatow.

The French Government have a wireless station at Kwang-chowwan for public and official use with a normal range of 500 miles.

Postal

The postal system in Kwangtung is well-organized. The means of conveyance are rail, steam boat, motor boats,

[1] This station was not working in Nov., 1914.

sampans, and runners. A runner usually makes 100 *li* (about 30 miles) a day, and carries a limit of 80 lbs. weight.

The province is divided into three postal districts with head-quarters at Canton, Swatow, and Kiungchow and a sub-district at Pakhoi. Letters are accepted for any part of the world, and all the official cities and large market towns have post offices.

CHAPTER X

FOREIGN TERRITORIES IN KWANGTUNG

THE foreign territories in the province of Kwangtung are the British colony of Hongkong, the Portuguese colony of Macao and its dependencies, and the French leased territory of Kwangchowwan.

HONGKONG

The island of Hongkong was ceded to Great Britain at the close of the ' Opium ' War under Article III of the Treaty of Nanking (1842). A portion of the township of Kowloon on the mainland opposite the island was ceded under Article VI of the Convention of Peking (1860), and this territory was enlarged under a lease for 99 years to its present limits by a special Convention 1898.

MACAO

Latitude 22°–11′–30″ N.
Longitude 113°–32′–30″ E.

Situation and history.—The Portuguese settlement of Macao dates from the sixteenth century, and previous to the opening of the Treaty ports it was the one place where European traders could conveniently reside in China. It is situated on a hilly peninsula forming part of the district of Heungshan, at the western entrance to the Canton River, and some 40 miles westward from the British colony of Hongkong.

The Portuguese, whose fleet visited Canton in 1517, attempted to form settlements at Lampacao and Tamoa, and had trading stations at Chüanchowfu, Liampo, and the island of Sanchoan, previous to their landing at Macao in 1557. Whether it was by right of conquest or as a reward for

suppressing piracy is uncertain; but they were now permitted to remain in independent occupation of Macao, and at first exercised authority over the neighbouring country of Heung-shan. Later the Chinese authorities restricted the Portuguese to the peninsula, and in 1575 they built a wall across the isthmus and only permitted supplies to reach Macao by land at stated periods, at first every five days and afterwards every fifteen. Next they resumed the collection of customs dues at the port, and had to be bought off by bribes, which finally resolved themselves into a fixed annual sum of $500. This sum the Chinese regarded as 'tribute', and it was not till 1848 that the tribute and Chinese interference were both terminated by the Portuguese. An arch was built in 1870 at the barrier to celebrate this emancipation. By the Lisbon Treaty of 1887 China 'confirmed perpetual occupation and government of Macao and its dependencies by Portugal, as another Portuguese possession'.

Macao enjoyed great prosperity in the sixteenth century, owing largely to the Portuguese trade with Japan. It flourished in the seventeenth century, but the colony was several times attacked without success by the Dutch. In 1802 and 1808 detachments of British troops were disembarked to protect the settlement from an anticipated attack by the French. Since the development of Hongkong and the opening of the southern treaty ports Macao has lost its importance, and the rapid silting up of the harbour has destroyed its value as a commercial port.

The peninsula of Macao is covered by two ranges of hills rising 200 to 300 ft., and running north to south and east to west. Its length is about 3 miles, its greatest width about 2,000 yds., and its perimeter about 8 miles. It is overlooked by the mountains of Tui-mien Shan (Patera or Lappa) Island which lies across the harbour on the west.

The Portuguese town is built on the hills and lies mainly in the southern central part of the peninsula. The aristocratic quarter lies along the Bay of Praia Grande facing east, fronted by a fine promenade, and boulevard. Here are the principal

hotels, the governor's residence, the court house, and the Macao Club. The rest of the town consists mostly of narrow straggling streets of irregular character typical of an old Portuguese town. It extends across the peninsula to the inner harbour where are the bund and wharves. Much has been done in recent times to replace old tumble-down buildings and to build new streets, and in 1915 a new road was started connecting the inner and the outer harbours, which is likely to become the most important street of the town. The houses are gaily painted and have a picturesque appearance. The Chinese quarter is on the harbour side, and contains many gambling houses (chiefly in the Rua da Felicidade), which have helped to gain for Macao the name of the Monaco of the East.

Forts.—The highest point of the peninsula, on the east side, is occupied by the fort and lighthouse of Guia. Other forts are the San Francisco and Bona Parto at the north and south ends of the Praia Grande Bay; Fortaleza da Barra at the south point of the peninsula ; F. Dona Maria II at the north-east corner ; F. Mong-ha at the north-west corner, commanding the isthmus; and F. Monte in the centre above the ruins of the old Cathedral of San Paulo.

Harbour.—The inner harbour is formed by Macao peninsula on the east and the island of Tui-mien Shan on the west. It is about $1\frac{1}{2}$ mile in length and 600 yds. wide, narrowing to $\frac{1}{4}$ mile at the entrance. It has 2 to 3 fathoms of depth on the town side, but is encumbered by sandbanks on the west. The entrance is shallow and endangered by a sandbar. In 1911 the Government entered into a contract with a Hongkong engineering firm to dredge a channel of 6,000 metres with a uniform depth of 12 ft. Afterwards the channel shoaled again, and in 1915 a sea-going dredger was ordered presumably to remedy this defect. The *China Sea Pilot* (1912) describes the approach as a channel 111 ft. wide with a depth of 11 ft. at low water. Green Island in the upper part of the harbour is connected with the peninsula by an embankment. Between it and Macao a typhoon harbour for small craft has been dredged.

An outer anchorage in about 4 fathoms, mud bottom, lies 7 to 8 miles east-south-east of Fort Guia.

Roads.—The northern part of the peninsula is traversed by three principal roads: (1) running round the eastern coast from the Praia Grande to the Estrada da Porto do Cerco, the road along the north end leading to the isthmus; (2) Avenida da Vasco da Gama, which runs below and on the east side of the Military Hospital, Fort Guia, the Summer Residence (Flora), and fort Dona Maria II; and (3) Estrada Coelho do Amaral, starting from a point between the celebrated gardens of the poet Camoens and Fort Monte, and running along the east side of the peninsula past the village and fort of Mong-ha and between the embankment to Green Island and Monte do Amaral, till it joins the Estrada da Porta do Cerco at the neck of the isthmus. In the south of the town is a road leading to the Fortaleza da Barra.

Hygiene.—Macao is healthier than Hongkong. A system of hydraulic syphon drainage has stamped out the plague, and any suspected case is immediately taken to the plague hospital in the village of Wan-chai across the harbour. Attention has lately been turned to the eradication of malaria by draining the low ground and stagnant pools east of the city, and a further reclamation is going on near Green Island. So that as a health resort and a place of residence Macao has much to recommend it.

Missions.—The Catholic Missions in Heungshan have several schools, and in Macao there are two schools for Chinese children, one of which is supported by the municipality and the other by private subscription. There is also St. Joseph's Seminary, where Chinese and Portuguese youths are prepared for priesthood. The religious orders were expelled in 1910, at the time of the republican revolution in Lisbon.

Industries.—Silk filatures, tobacco manufacture, and brick and cement works on Green Island form the chief industries of Macao. A cotton-weaving factory was started in 1910. The principal exports are tea, fire-crackers, tobacco, and preserves.

There is a considerable launch and junk traffic with the port and though the customs-house opened at Kongmoon, with Wangmoon and Aimoon as out-stations, have reduced the area of the Lappa district, the value of trade for 1915 was 17,596,598 Hk. taels. 16,482 junks and 793 steamers entered and cleared at the Lappa stations in 1915, with a total tonnage of 1,107,932 tons.

Administration.—Macao and the islands of Tai-pa and Colowan, immediately south of the peninsula, are administered by the Governador, assisted by the Conselho do Governo and the Leal Senado da Camara. There is a garrison of about 500 men, under a general, including Europeans, Indian, and a few Chinese.

The French Consul resides in Rua do S. Lourenço, 18 ; but the consuls of other European nations are mostly resident in Hongkong.

Population.—Including the islands of Tai-pa and Colowan, the population, according to the census of 1910 was 74,866, comprising 3,601 Portuguese, 244 foreigners, and 71,021 Chinese.

Neighbourhood.—On the north is the large island of Heungshan (Hsiang Shan), on the south coast of which, 3 miles north-east of the Porta do Cerco, is the little walled town of Tsinshan 前山 or Casa Branca. It has 18,000 inhabitants, a good Chinese school, and some industries. One of the chief customs stations in the Lappa district is outside the walls of Tsinshan.

About 8 miles north of the Porta do Cerco in Heungchow bay is the model town of Heungchow, a free port, planned in 1908 by a group of wealthy Chinese, and intended to be built on modern lines. The plan has not, however, matured. It is connected with Tsinshan by a carriage-road.

On either side of the isthmus are the villages and likin stations of Kan-chiap and Kut-tai.

West of Macao across the harbour is the hilly island of Tui-mien Shan (Patera or Lappa), with the three villages of Shek-kok (a likin station), Wan-chai in the middle, and An-kang in the south, ranged along the harbour side.

At Wan-chai is the plague hospital, some native docks, and other native industries.

Off the south-east corner of Tui-mien Shan are the two Malowchow islands, on the northern of which is one of the principal Lappa customs stations, transferred thither from the village of Kung-pei-wan in 1871.

On the south the three islands of Taipa, Macarira, and Mong-chao (reading from east to west) form a barrier, and between them the channel leading to the Broadway is shallow. It is recorded that it has been passed by a vessel of 10 ft. draught.

South again of this group are the islands of Colowan and Wang-kam. Tai-pa and Colowan (or Ko-ho) are under the Portuguese administration. They are all hilly islands, and Adam's Peak in Wang-kam is 1,950 ft. high

Currency.—The Chinese currency chiefly used in the district consists of copper cents and silver 20-cent pieces of the provincial mint, and notes ($1, $5, and $10) endorsed by the Canton Chamber of Commerce. Silver dollars and copper cash are rarely seen.

Supplies.—Supplies on a large scale would be obtained at Hongkong. Current supplies of various foods and necessities would be available at Macao, though no patent fuel or liquid fuel is obtainable (according to the *Sea Pilot*, 1912), and only a small amount of coal, about 50 tons, is kept in stock.

Communications.—The Hongkong, Canton, and Macao Steamboat Co. run two steamers daily between Macao and Hongkong (40½ miles), and a Chinese company has a daily service between the two ports. There is a daily steamer service (Saturdays excepted) between Macao and Canton (88 miles). There is launch and junk traffic with the various towns in the Delta and on the river routes (West, North, East, and South-West Rivers), besides a considerable coasting trade.

Macao is connected with Hongkong by telegraph cable. It has a Portuguese post office and an office of the Eastern Extension Telegraph Co. There are several agencies of the Chinese post office in the immediate neighbourhood including a telegraph office at Tsinshan.

The wireless station (a low-power Telefunken station with a radius of about 100 miles) near Kan-chiap on the road from Macao to Tsinshan, had been rebuilt and was in operation in 1915—for official use only.

The roads on the peninsula have been already described, besides that between Macao, Tsinshan, and Heungchow; but roads are practically non-existent in the Delta country, communication being almost entirely by water.

The standard time in use in Macao is 8 hours ahead of the Greenwich mean time.

A railway from Macao to Canton has been in contemplation for some years (see p. 159), but it has not yet materialized.

The following table of times occupied by junks in journeys from Macao to neighbouring ports was published in *Maritime Customs, Decennial Reports*, 1882–91, p. 611.

To and from	*Average length of voyage. Days of* 12 *hrs. each.*
Canton	3
Chanchuen	2
Shekki	1½
	8 hrs. towed by launch
Towmoon	1½
Kongmoon	2
Tanshuihow	2
Tikhoi	2½
Cheungsha	2½
Kwonghoi	2
Yeungkong	2
Sheklung	3 to 4

KWANGCHOWWAN (see Plan)

Approximate Latitude 21° 10′ N.
Approximate Longitude 110° 24′ E.

Kwangchowwan, bay and territory, was leased to France by the Chinese Government in 1898 for a period of 99 years; and the islands Tan-hai and Nau-chau, which protect the bay

on the south, were included in the concession. The whole leased territory embraces 325 square miles and includes 809 villages with 189,000 inhabitants.

The bay and approaches.—The bay is entered from the east side through a channel rather more than a mile wide with depths of 7 to 20 fathoms between the islands of Tan-hai and Les Aigrettes. This channel, which is called Le Goulet, is itself approached by a channel leading north from the northernmost point of Nau-chau island, between shallow banks and across a bar on which there is only $3\frac{3}{4}$ fathoms at low tide. The current runs very strong outside the entrance of Le Goulet, and inside there is a tidal current running at $2\frac{1}{2}$ to 3 knots an hour. Kwangchowwan bay is $6\frac{1}{2}$ miles long from its eastern entrance to Tat-chin island at the mouth of the Matshe River, and about $5\frac{1}{2}$ miles in width; but the navigable portion is comparatively narrow though never less than 3 cables in width between the 5-fathom contour lines. It is, in fact, a continuation of the estuary of the Matshe River.

The western entrance of the bay is between the island of Lin-fa-than and the mainland. It is called the Chenal de l'Estoc and leads from Luichow, but it is only navigable by small craft.

The Matshe River.—The Matshe or Montao River which comes in from the north, with main channel on the west of Tat-chin island, forms an inner harbour. Three miles above the entrance and one mile above Fort Bayard is Hoi-tow road, about 4 cables wide and 16 fathoms deep. Up to the north end of Taocien island the Matshe has not less than 5 fathoms of depth though gradually decreasing in width; but from this point to Matshe town (about $2\frac{1}{2}$ miles distant) the depth decreases to 3 fathoms, and thence to Montao ($3\frac{1}{2}$ miles) the depth is probably under 7 ft. in places at low water springs. Above Montao the river is not navigable for junks. Kwangchowwan bay and inner harbour are the only good harbours in this part of China.

The settlements.—At the entrance of the Matshe River, on the east side, are the three islands Tat-chin, S. Pak-hai, and N. Pak-hai. On the second of these is Port Beaumont, the

site of the former port office. The new site for this office is Nivet Point on the mainland above the islands ; and opposite to Nivet Point, on the west of the Matshe, is Fort Bayard, the head-quarters of the Hoi-tow district, a military post with landing pier and mooring buoy. At the back of Fort Bayard and to the northward is a chain of hills on which is situated the military post of Hoi-tow. The settlement on the west of the river is the new town of Kwangchowwan, and that on the east which includes barracks, church, and the principal business houses, is known as Port Doumer. There are three garrisons, at Fort Bayard, Hoi-tow, and Nivet Point. Kwangchowwan is a free port ; but at present there are no adequate harbour facilities.

Surrounding country.—The coast of the mainland is low and sandy, and behind it are greyish plains with little cultivation. Northward the ground rises but remains equally denuded. Trees are rare on the coast, and farther inland they are mostly pines. The valleys inland are a succession of rice-fields separated by streams bordered by bamboos, with here and there patches of sugar cane. The district is purely agricultural and is poor, though efforts have been made by the French to develop the resources of the country, and to attract to the place some of the trade which normally passes to Canton and Hongkong.

Two conspicuous points near Hoi-tow are the Tour du Bonheur north-east near the river and Surprise Hill inland south-west. The latter is an extinct volcano, the crater of which is now occupied by a lake.

The territory.—The territory is divided into three Chinese sections : (1) six cantons with Che-kam as chief place, (2) two cantons with Po-dao as chief place, and (3) the islands of Tan-hai and Nau-chau, with Tam-sui as chief place. The centre of native trade is still Che-kam, which lies on the right bank of the Matshe about 5 miles north of Hoi-tow. A canal was cut in 1901 from the river to the town, but the place is accessible only to junks and barges, which moor alongside the quays in a muddy channel. Che-kam is a walled town

with narrow streets, and a population estimated at 8,000. The most conspicuous object is the 'Pagoda of Canton' where the Cantonese guilds meet. Sweet potatoes, sugar cane, and salt are the chief exports.

Po-dao (Po-t'ao), on the east side of the estuary and about 6 miles north-east of Port Doumer, is the centre of an agricultural district of large sandy fields where sweet potatoes and sugar cane are grown. Its most conspicuous points are two brick arches and a fine pagoda.

Tam-sui lies on the west coast of Nau-chau and has a military post; and a short distance south of it is the village of A-kong, where there is a pagoda and a new fort. On the summit of the island (279 ft.) is a lighthouse. Nau-chau is about 5 miles long: it is well cultivated, and has a population of about 20,000.

Administration.—The territory is under the Governor-General of Indo-China, who is represented by an 'administrateur' with three officials, who control the three territorial divisions over the local Chinese administration. Important cases are tried by mixed courts consisting of one of these officials with two Chinese assessors. If foreigners are involved the case is tried by the administrateur or his deputy. The court of appeal is at Hanoi, in Tonkin. Order is maintained by a local militia, about 300 strong.

Native inhabitants.—The inhabitants of the territory belong chiefly to the Lao race, which seems to have originated in a fusion of the aborigines with a foreign ethnical element. The Laos have an almost European type of face: cheekbones scarcely projecting; nose not flattened in the upper part; complexion bronzed, and eyes black and large and scarcely at all oblique. In the islands of Nau-chau and Tan-hai the admixture of Malay blood has produced a type which has the Lao characteristics but with the lips fuller and a more copper-coloured complexion.

The left bank of the Matshe River is peopled largely by natives of the Kwangtung province who have broad faces, protruding foreheads, flattened features, and small oblique eyes.

The dialects are so varied that the natives of the right bank of the Matshe do not understand the speech of those of the left bank; but in general throughout the district the Cantonese dialect prevails in the direction of Luichow, and a Hoklo dialect in the northern part of the peninsula. The religion of natives mainly consists of Buddhism combined with a host of superstitions.

Climate.—The climate resembles that of Tonkin, being rainy and very hot in the summer, while in winter the north-east monsoon causes sudden changes of temperature. In the valleys the temperature is more even. From October to January the climate is dry and resembles that of Nice. February and March are foggy on the coast and often rainy inland. On the whole the district is not unhealthy for Europeans.

Communications.—There is a good road from Hoi-tow to Che-kam (about 5 miles) and another (about 6 miles) from Port Doumer to Po-dao. Otherwise the land communications consist of a few mandarin roads, centuries old, paved with slabs, and paths which in barren land are wide enough to take a buffalo cart, but in cultivated regions are very narrow. There are at present no railways, though various proposals for their construction have been discussed (see p. 159), and France has a right to make a maritime station at Onpo at the north-west corner of the Luichow peninsula and to connect it by rail with Kwangchowwan.

Steamers of the Tonkin Navigation Co. run weekly between Haifong, Pakhoi, Kwangchowwan, and Hongkong, and the Messageries Maritimes has a fortnightly service from Haifong to Hongkong calling at Kwangchowwan. There is a large junk traffic between Che-kam and the coast towns of the province.

There is a French postal service; and a wireless telegraphic installation which communicates with Saigon.

CHAPTER XI

RAILWAYS

ALTHOUGH there are many projects on foot for the development of railway construction in Kwangtung, the actual progress made hitherto has been small and on the whole unremunerative. This is partly due to the long-standing jealousy of foreign interference on the part of the Cantonese, and to their desire to carry out their own railway expansion in spite of repeated failures to find the necessary capital without the assistance of foreign loans. These drawbacks are well illustrated in the continued postponement of the building of a loop-line round Canton to connect the Canton–Hankow and Canton–Kowloon railways. Neither of these lines is at present a paying concern. In fact, only the small Canton–Samshui branch and the Sunning Railway are worked at a profit. Trade still favours the water transport with which Kwangtung is amply provided, and the goods traffic on the railways has not been able to compete with that of the rivers. The war has put an end to any prospects of foreign loans and material for the time being, and no substantial progress is likely to be made in railway construction until more settled conditions return.

The following lists show the railways in operation or under construction and those projected :

(A) *Railways in operation and under construction.*		*Mileage in operation in Kwangtung.*
I.	Canton–Hankow	140
II	Canton–Samshui	30·4
III	Canton–Kowloon	111
IV.	Sunning	(approx.) 70
V.	Swatow–Chaochowfu	(approx.) 26·5

(B) *Projected Railways.*

(*a*) Chaochowfu–Canton.
(*b*) Canton–Nanchang (Kiangsi).
(*c*) Canton–Hoyün.
(*d*) Canton–Macao.
(*e*) Samshui–Nanning.
(*f*) Sunning railway extensions.
(*g*) Kwangchowwan–Nanning.
(*h*) Yamchow–Yünnanfu.
(*i*) Hainan (Hochow–Lokwei).

THE CANTON–HANKOW (OR YÜEH–HAN) RAILWAY

The original concession for the building of the railway from Canton to Hankow, some 700 miles, was granted to the American China Development Company, and the agreement was signed in April 1898. Beyond a survey of the track little progress was made with the main line for several years, though the Canton–Samshui extension was built and opened to traffic in 1904. Meanwhile, Belgian interests had gained control of the company greatly to the displeasure of the Chinese, and a long dispute followed, which was settled by the reassertion of American interests. Progress with the line, however, was still delayed, and eventually the concession was withdrawn by the Chinese Government, compensation to the amount of $6,750,000 in gold being paid to the American company for work done, which included two surveys, the Canton–Samshui line, and about 50 miles of embankment at the Canton end of the main line. In raising the required money the Chinese had recourse to the Colonial Government of Hongkong, who issued a loan for the purpose in 1905, and a new arrangement was made under which the Chinese were to construct the Kwangtung section of the railway and the remainder (the Hupeh and Hunan section) was to be included in the Hukuang system, and to be reserved for British enterprise. At the beginning of the war British capital was withdrawn, and the construction of the northern section

was carried on by American capital, diverted from the Hankow –Szechwan Railway.

Progress in both sections is still slow, but the line has now been completed from Canton to 15 miles beyond Shiuchow, and is opened to that city (m. 140). Here it is likely to stop until the Hunan section is completed, and it is doubtful if the Kwangtung Company will be able to find the funds for the construction of the exceedingly difficult length of line remaining in the province. Meanwhile, the northern section has been completed as far as Changsha, and the company has taken over an existing stretch of line from Changsha to Chuchow Hun, so that the railway may be said to be in operation now from Wucharg, opposite Hankow, to Chuchow Hun (m. 259). The whole area traversed by the railway is liable to sudden and heavy floods, and in consequence bridges and embankments have had to be raised high enough to insure immunity from this danger. The most vulnerable points of the line in Kwangtung are (*a*) the rocky gorge between miles 75 and 78 and (*b*) the bridge over the Yungyün river at m. 84·5.

Kwangtung section

General description.—The Kwangtung section has a total length of 214 miles, following the proposed route to Ichang Hun, and 155 miles have already been constructed. It is worked by the Kwangtung Mercantile Administration of the Yüeh-Han Railway Co., Ltd., and foreign engineers have been employed under a Chinese engineer-in-chief, though only two, an American and a Japanese, were remaining in 1913.

The track.—The line is standard gauge, 4 ft. 8½ in., and single throughout except at stations. The track is laid with 75 lb. rails in 30 ft. lengths. The sleepers are of Australian wood, and the rails are fixed with iron dog-spikes of American spoon-head type, no chairs, chair-plates, or couch-screws being used. The ballast, which was originally sand, is to be replaced by stone. The line is said to be well located, fairly well constructed, and very well maintained.

Curves and gradients.—The sharpest curve has a radius of

about 1,432 ft. The main line turnouts have an angle of 12°. The ruling gradient is 1 in 166.

Bridges.—The most important are :

m. 12·5, over the Tsungfa river : 15 spans of 60 ft.

m. 50·9, at Par Kong Hou (Pakonghow), 200 ft. long.

m. 84·5, over the Yungyün river near Yingtak : three 200 ft. spans with through lattice girders, and two 60 ft. and one 80 ft. plate deck girders. In addition to this there is an opening of five 30 ft. spans in the embankment on the south side to relieve flood pressure.

m. 143, over the Tsêng Shui (Ching Shui) by Shiuchow, 800 ft. long, with one through lattice girder of 200 ft., five through lattice spans of 100 ft., one 30 ft. and one 60 ft. plate deck spans.

Tunnels.—In the gorges there are tunnels at m. 61·87 (370 ft.), at m. 75·69 (1,800 ft.), and at m. 76·75 (50 ft.) : beyond Wushek (m. 121·7) is the Ching-fung-ting tunnel, 500 ft. long ; and about 12 miles beyond Shiuchow is the Kolientsun (Kao-lien-ts'un) tunnel, 1,400 ft. long, which was still uncompleted in 1916. It is estimated that between m. 170 and m. 200 sixty-six tunnels will have to be bored.

Cuttings.—The width of the cuttings is a feature of tactical importance. Even in solid rock a width of 24 ft. has been maintained. This allows for 18 ft. standard formation width, plus twice 3 ft. for the width of the side drains. The reason for this excessive width appears to lie in the fact that the permanent way will be, and indeed now is, extensively used by natives as a highway. For embankments, however, the standard width of 18 ft. has been adopted.

Speed.—The average speed of trains in 1911 was estimated at 15 miles per hour.

Workshops.—Temporary workshops are at Wong-sha, the Canton terminus.

Rolling stock.—In 1911 15 locomotives were available comprising 4 of the Fornay type and 6 of Mogul-tender type. In 1914 5 consolidated locomotives were added, 3 from the American Locomotive Co. and 2 from the Baldwin Co.

In 1911 there were 34 passenger coaches and 192 goods wagons, all fitted with Westinghouse system brakes, central buffers and couplings. The passenger cars were mostly of American make, as also the box cars, though some of the latter were British.

Stations.—The stations, which are all crossing places, are on an average $6\frac{3}{4}$ miles apart.

List of Stations

mileage	
0	Wong Sha (Wong-sha).
2·4	Sai Chuen (Saitsün).
7·2	Shui Ping (Siuping).
9·7	Tai Long (Tailong).
12·7	Kong Ts'un (Kongtsun).
16·3	Kwok Tong
19·0	Sun Kai (Sunkaihü).
21·4	Sam Wa Tim.
24·4	Tai Kau Kui.
26·5	Quan Tin (Kwan-tin).
35·5	Ngan Chan Au.
41·2	Ying Chui.
44·6	Yuen T'am (Yüntam).
50·9	Par Kong Hou (Pakonghow).
55·0	Shek Pie Hang (Shek-pai-hong).
58·2	Kou Wong Shek (Wongshek).
65·75	Lai Tung (Laitung).
73·4	Lin Chou Kong Hou (Kong-hau).
86·9	Ying Tak (Yingtak).
93.9	Ho Tau (Hotow).
103·25	Tsing Kai.
109·3	Sha Hou (Shahow N.)
118·4	Tai Hang Hou.
121·7	U Shek (Wushek).
130·08	Ma Ba (Mapa).
139·2	Chu Kong Hong.
139·29	Shiu-kuan or Shao-chou Fu (Shiuchow).

mileage	
148·5	Lai Po Tao (Liputow).
162·0	Yang Kai.
170·2	Lok Cheong (Lokchong).
197·6	Lo Ka Do.
205·0	Ping Shek (Pingshek).
216·0	I Chang (Ichang Hun).

Wharfage.—At Wong-sha there is 500 ft. (lineal) of wharfage. Tracks lead to two loading piers, each of which has a 10-ton crane. Ocean-going steamers lightened to 8-ft. draught can go alongside these piers from three-quarter to half-tide. No steamers can go alongside the bund. The piers are T-shaped and project 100 ft. from each extremity of the bund.

Country bordering the railway

Wong-sha to Kongtsun.—Leaving Wong-sha terminus the line runs for a mile along the river, then bends north-west through rice fields, passing the Tung-ya college on the left. It then turns again northward between low hills into a flat country, with rice fields and frequent streams. Villages are numerous, surrounded by trees ; and cows and water-buffalo are plentiful. The Shektsing arsenal is passed about ½ mile north-west of Shui Ping station (m. 7·2). A few low hills border the line on the right between here and Kongtsun (m. 12·7), before reaching which town the Tsungfa or Tung-hoi river is crossed, a busy stream about 50 yds. wide, which comes in from the district town of Tsungfa (P.). Kongtsun (P.), together with Kotong, a market town about ½ mile to the W., forms a busy centre of population.

Kongtsun to Par Kong Hou.—From here the line, after passing some low hills, traverses a fertile rice plain with numerous villages surrounded by bamboo, fir, and other trees. At Kwok Tong (m. 16·3) it crosses the river which comes in from Fayünshing (P.) ; and between Sunkaihü (m. 19) and Quan Tin (m. 26·5) the Wong Tam river is crossed several times. Ngan Chan Au (m. 35·5) lies in a hilly district where

tea is cultivated, and where there are numerous Hakka settlements. After Ying Chui (m. 41·2) the line runs through low hills and crosses two branches of the Sha Ho. It runs along the east of the Sha Ho from Yüntam station (m. 44·6) for about 6 miles, then crosses the Tai-kong river just before reaching Par Kong Hou station (m. 50·9).

Par Kong Hou to Ying Tak.—The line now runs through low hills and approaches the North River, which it follows closely on the left bank, only leaving the river to cross pronounced bends. The North River at this point bends sharply westward down the Tsingyün Gorge to the large town of Tsingyün (see *Gazetteer*). The line here runs through high hills with belts of bamboo alternating with grassy treeless expanses, along a series of cuttings and embankments. At mile 58·2 in the large village of Wongshek (P.), and between miles 75 and 78 are the Ma-ying and Ying-yang gorges between 1,000 ft. foothills, which involved the boring of two tunnels. After this the hills are lower and are relieved by clumps of fir and bamboo. The line here crosses the Tit-k'ai river and another stream about 3 miles beyond, and after crossing the Yungyün river by an important bridge at m. 84·5 reaches Ying Tak station (see *Gazetteer* under Yingtak).

Ying Tak to Shiuchow.—In this section the country is on the whole undulating or flat surrounded by low hills and with high hills in the distance. The railway follows the course of the North River as far as mile 120, and then leaves it to avoid a big bend, rejoining it at Shiuchow. As far as Hotow (m. 93·9) the line passes through rather poor country with grass and small plantations of fir and bamboo. At Pak-shek-ju, beyond Hotow, are quarries of stone which is used in the manufacture of cement. Hills enclose the river on both sides near Tsing Kai (m. 103·25), and beyond this station the ground is undulating and under cultivation. Two small rivers are crossed before reaching Shahow N. (m. 109·3), after which place the country is hilly for 3 miles and then opens out and is more productive. Wushek, a market town of some 500 houses, is reached at m. 121·7, and there is good

landing on both sides of the river. The country is now hilly with fir woods alternating with rice lands. The Mapa river is crossed and Ma Ba station reached at m. 130·2; and the line runs through undulating grassy country to Shiuchow, where it approaches the confluence of the two upper branches of the North River (see *Gazetteer* under Shiuchow):

Shiuchow onwards.—From Shiuchow the line follows the left bank of the Tsêng Shui, or eastern branch, to m. 143·5. Here it crosses the river on an important bridge, and then bends westward to the Wu Shui or western branch; which it follows except in places where a loop can be avoided. The country is now hilly to mountainous, and there are coal mines on both sides of the line. There is a station at Liputow (m. 148·5), and an important tunnel at Kolientsun, about 12 miles beyond Shiuchow. Construction was completed in 1916 to a point 15 miles beyond Shiuchow, with the exception that the Kolientsun tunnel was still uncompleted; and beyond this point survey work only has been done.

Branches and extensions

The Canton–Samshui Railway is an extension of the Yüeh–Han. The connexion is made by ferry from Wong-sha across the Pearl River to Shekwaitong.

A loop line some 5 or 6 miles in length, running round Canton city to connect Wong-sha with the Canton–Kowloon Ry at Tungshan, is projected. The route has been surveyed, but the promised construction has been continually delayed.

Canton–Samshui (or Kuang–San) Railway

This line is a branch of the Yüeh–Han Railway. It was built by the American company which held the original Yüeh–Han concession, but is now the property of the three provinces Kwangtung, Hunan, and Hupeh, and is administered by a board of three directors, one representing each province. Construction began in 1902, and the line was opened as far as Fatshan at the end of 1903 and to Samshui in September 1904. The line runs through a busy and populous region, and carries

a large passenger traffic ; but it passes many wide streams and is liable to suffer from floods. It has a capital of about 2,000,000 Mexican dollars, and has proved very remunerative. The whole staff is Chinese. The strategic importance of the line with regard to a possible advance on Canton is discussed in the *Military Report on Chinese Railways*. The distances in this account will be reckoned from Samshui.

General description

The Canton terminus of the line is Shekwaitong, on the right bank of the Pearl River opposite Wong-sha, and the line runs a distance of 30½ miles to Samshui, a Treaty Port at the head of the Canton Delta, and at the point of junction of the West and North Rivers.

The track.—The track is of standard, 4 ft. 8½ in., gauge, and is single from Samshui to Fatshan (m. 19·2) and double from Fatshan to Shekwaitong. The rails are flat-bottomed 75-lb. rails in 30-ft. lengths, height 4¾ in. The sleepers from miles 0–19·2 are of Japanese hardwood, 8 ft. × 8 in. × 4 in. : from mile 19·2 to 30·4 of steel, 8 ft. × 8 in. × 4 in. The rails are fastened by iron dog-spikes, 5 in. long and $\frac{9}{16}$ in. square. The ballast from m. 0–19·2 is hard clay : from m. 19·2 to 30·4 stone.

Curves and gradients.—A 6° curve (radius 955 ft.), of which there is one only at m. 20, is the sharpest on the line. Angle of main-line turnouts, 12°. The ruling gradient is 1 in 250.

Bridges.—The large bridges are all built with girders supported on concrete piers. The most important is that at mile 4·4 across the creek E. of Sainam, consisting of 9 spans of 60 ft. each, with a total length of 560 ft. Other large bridges are at m. 21·5, 24·2, and 29·42, with 2 spans of 30 ft. and 1 span of 60 ft. each.

Tunnels.—There are no tunnels.

Rolling stock.

LOCOMOTIVES

No.	*Description.*
6	Passenger tender engine. Cylinders 17×21. Water capacity, 3,500 gallons.
3	Shunting.
9	

CARRIAGES

	No.		
1st class	4	Total passenger capacity	192
2nd class	7	,, ,, ,,	500
3rd class	25	,, ,, ,,	2,500
	36		3,192

TRUCKS

Nature.	No.	Tare.	Load.	Floor space.
		tons.	tons.	ft. ft. in.
Box trucks	5	12	20	30 × 9 6
Flat trucks	3	16	20	30 × 9 6
Flat trucks, low-sided	12	18	20	30 × 8 8
'Breakdown' truck	1	36	lifts 25 tons	
Baggage ,,	5	17	20	38 × 9
Cattle ,,	nil			
Hand ,,	7			
Push ,,	7			
Motor car	1			
	41			

The rolling-stock is chiefly of American make, but the 3rd-class coaches and the box cars are made in the railway shops.

Hand and Westinghouse brakes are used throughout, and central automatic couplers.

A train consisting of one locomotive and nine coaches is always in Samshui station at night, ready for the first journey in the morning. One engine and eight coaches remain at Fatshan at night.

Trains and speed.—About ten trains a day run the whole distance and 14 local from Fatshan to Shekwaitong.

The whole journey occupies 1 hour and 50 minutes including stops, giving an average speed of 16½ miles per hour. There are no separate goods trains.

Workshops.—The workshops are situated at Shekwaitong. They are capable of dealing with all running repairs and can turn out passenger cars and goods wagons.

Stations.—Fatshan is the only permanent station. The rest are temporary structures erected at an average distance of 2 miles.

mileage	*List of Stations.*
0	Sam Shui (Samshui).
2·28	(Tai Shan Tong).
3·60	Sai Nam (Sainam).
6·00	Thau Ma Ying.
8·65	Sze Sze Tau (Szetzetow).
11·12	Shiu Tong (Siutong).
14·6	Shang Pak (Sheungpak).
16·2	Lo Chuen (Chai Bin) (Chaipin).
17·9	Kai Bin (Kaipien).
20·15	Fat Shan (Fatshan).
22·2	Qua Po Sun (Kwaposun).
23·15	Tai Chan (Taichenshi).
23·93	Shui Ta Hu.
25·04	Tam Pin (Tampin).
25·99	Siu Pin (Siupin).
27·56	3-Eye Bridge.
29·29	5-Eye Bridge.
30·4	Shek Wai Tong (Shekwaitong).

Stores.—The central store for the line is at Shekwaitong, where some 40,000 ft. of timber may be found, besides 8,000 sleepers and 2,000 rails. There is a portable steam crane lifting 5 tons. At Fatshan large quantities of sleepers are stored, as also at Lo Chuen where there are also spare rails. Timber up to 8 in. can be cut in the surrounding country for repairing bridges; and Samshui is a point of passage for large timber rafts. The timber runs to 6 in. and 8 in. fir.

There are section houses every 6 miles along the line. Each has a hand car, a push car, 2 or 3 rails (2 or 3 rails are also alongside the track on frames between sections), spikes, bolts, and tools. Thirteen section hands sleep at each house.

Country bordering the railway

From Samshui (see *Gazetteer*) the line runs parallel to Samshui Reach behind the embankment, which protects the country from the river floods, to Sainam (m. 3·60), a thriving

industrial town (see *Gazetteer*). East of Sainam a large creek is crossed by an important bridge at m. 4·4 ; and at m. 6·50 the line runs into a cutting 30 to 40 ft. deep in which is a siding for 20 to 30 trucks. At m. 7·65 a low range of partly wooded hills appears to the north, and at m. 11·12 Siutong is reached, a village of some 5,000 inhabitants. The line now passes through two deep cuttings and the country is undulating and wooded. From Sheungpak (m. 14·6) to Lo Chuen (m. 16·2) the line runs on an embankment over paddy ground and crosses a large creek three times. There are hills about ½ mile north-east of Lo Chuen station. Between Kaipien (m. 17·9) and Fatshan (m. 20·15) the country is devoted to vegetable cultivation ; and an embankment with a road runs close to the railway. This embankment would command the town of Fatshan.

Fatshan station (m. 20·15) is a large brick building with a long concrete platform (for the town see *Gazetteer*).

Between Fatshan and Canton the country is like a vast vegetable garden ; and as it is intersected by creeks and irrigation canals it would be unfavourable for the movement of troops. The line, however, throughout its whole length could be used for infantry marching, though the double portion of the track with its stone ballast would be more suitable for the purpose than the single part.

Wharfage.—The terminus at Shekwaitong is on the river bank in Fati opposite Wong-sha, the terminus of the Canton–Hankow line, with which it is connected by a ferry. There is a wharf, 125 ft. by 75 ft., at Shekwaitong with a railway track ; and there is a depth of 7 to 10 ft. alongside at low water, the rise and fall of the tide being 2 ft. There is a crane lifting 3 tons, a lighter of 60 tons, and a pier for passengers 80 ft. by 20 ft.

In 1913 there were four steam ferry boats capable of carrying 1,300, 1,200, 300, and 30 passengers respectively—one of them, the Sam Lee (300 passengers), tied up at Shekwaitong wharf at nights, and the others at Wong-sha. Besides these there was a rectangular pontoon boat 60 ft. by 30 ft. capable

of carrying one 8-wheel locomotive ; and one small rectangular barge with carrying capacity of 4 tons.

Connexion with other lines.—The ferry above described connects the Canton–Samshui with the Canton–Hankow line.

Projects and extensions.—There is a project to extend the line along the West River to Wuchow and thence to Nanning ; but nothing is likely to be done at present. A survey has been made for a line from Macao to Canton ; and a concession was granted to a Portuguese syndicate for a line from Macao to Fatshan in 1902, but it has not yet been taken up and the whole project is in suspense.

Canton–Kowloon (or Kuang–Chiu) Railway

The concession for the construction of a railway from Canton to Kowloon was granted to the British and China Corporation in 1898 ; but opposition being subsequently manifested to foreign ownership of the line, an arrangement was made by which it should be divided into two sections :

(1) The British section from Kowloon to Shumchün ($22\frac{1}{4}$ miles) lying within the British leased territory.

(2) The Chinese section from Shumchün to Canton ($88\frac{1}{2}$ miles). Construction began in the British section in 1905 and was completed in October 1910. It was difficult and costly, the country being extremely broken ; and five tunnels had to be bored, that of Beacon Hill taking 28 months to complete. A loan of £1,500,000 for construction of the Chinese section was arranged between the Chinese authorities and the British and China Corporation in 1907 ; construction began in June 1908, and the whole line was opened on October 4, 1911.

The special engineering feature of the Chinese section is a series of seven bridges across the valley of the East River between miles 70 and 79.

Under the loan agreement the local administration of the railway is in the hands of a Chinese managing director, associated with a British engineer-in-chief and a British chief accountant.

The line should benefit greatly when the loop connecting it with the Canton–Hankow Ry is constructed ; meanwhile it is not in a flourishing condition financially owing to the competition of the river services which manage to retain the goods traffic and to other causes which include the damage done by floods and the increased cost of railway material.

Distances in this account are measured from Kowloon.

General Description

The line is 111 miles in length and of standard, 4 ft. 8½ in., gauge. It is single except for a length of 1·80 miles at the Canton terminus and from mile 0 to 1·5 ; but sufficient land has been purchased for a double line except between miles 70·25 and 76·25, and all bridges in the British section are wide enough for a double track. The cuttings in this section with the exception of the approaches to Beacon Hill tunnel and at three other minor points have also been taken out for a double track and many of the banks are wide enough for that purpose.

The rail used in the British section is a flat-bottomed 85-lb. rail in 36-ft. lengths ; and a rail of similar weight and section, rolled at the Hanyang Iron Works, is used in the Chinese section.

The sleepers are of Australian hardwood. In the British section they measure 10 ft. by 10 in. by 5 in. and are laid 2 ft. apart ; in the Chinese section they measure 8 ft. by 9 in. by 5 in. and are laid 2 ft. 7½ in. apart.

The rails are fastened with dog-spikes, 4 in. by ½ in. square in the British and 5 in. by ¾ in. square in the Chinese section.

The bottom ballast in the British section is laid to a depth of 6 in. with a top ballast of granite making 1 ft. 8 in. from formation to rail level ; the Chinese section is ballasted with stone.

Curves and gradients.—The sharpest curves are met in the British section, where there is one of 6° (radius 955 ft.). In the Chinese section, if two 4° curves (radius 1,432 ft.), used on deviations to avoid some slipping earth, are excepted,

the maximum curve is 3° (radius 1,910 ft.). The ruling gradient in the British section is 1 in 100; in the Chinese section 1 in 150. The angle of main line turnouts is 1 in 10.

Bridges.—Minor bridges and culverts in the Chinese section and all the large bridges except three are built in cement concrete. The largest bridges are in granite. There are 46 girder bridges with clear span totalling 4,868 lineal feet, 39 arched bridges (exceeding 5 spans) with clear span totalling 546 lineal feet, and 140 arched bridges and culverts (less than 5 ft. span) with clear span totalling 544 lineal feet.

The most important bridges are those by which the East River delta is crossed near Sheklung :—

m. 70, a bridge of 4 spans of 224 ft. each with two smaller spans of 60 ft. each.

m. 71, a bridge with 3 spans of 224 ft. each and two of 60 ft. each.

m. 77, a bridge with 3 spans of 100 ft. each and two of 60 ft. each.

In the British section the bridging is comparatively slight. Major bridges with clear opening of 40 ft. or more are 19 in number with total span of 1,480 lineal feet; and there are 29 minor bridges totalling 38 ft. lineal span.

Tunnels.—The tunnels, five in number, are all in the British section. The most important is the Beacon Hill tunnel, which runs through a chain of hills cutting off the Kowloon peninsula from the mainland. It is reached by a heavy gradient entailing a large amount of earthwork. This tunnel begins at m. 3·75 and has a total length of 2,404 yds. It is built for a single track and is lined throughout with brick. The brickwork, though some parts have only a very thin ring, is 1 ft. 8½ in. thick on the arch and side walls generally.

The remaining four tunnels are for a double track; viz. :

At mile	*Length.*	
2·55	50 yds.	Bricklined throughout
9·58	110 „	„ „ arch only
10·18	57 „	„ „ „ „
12·28	308 „	„ „ „ „

There are granite masonry portals to all tunnels.

Rolling stock.

Locomotives [1]

At Shumchün	2
At Sheklung	3
At Tai Sha Tau	8
	13

Tenders
10

For both goods and passenger service the engines are of 2—6—0 type with bogie tender; driving wheel 5 ft. in diameter; cylinders 19 in. diameter by 24 in. stroke; weight of engine and tender in working order—with 4,500 gals. of water and 5½ tons of coal—108·05 tons. Economical speed 43 m. per hour. The brake-gear is Westinghouse, air pressure.

Coaches

Corridor type with platforms at ends: total length over headstocks 60 ft. 11 in. Body of teak, steel underframes, two 4-wheeled bogies.

1st class	3	Compartments and side corridors; passenger capacity 162.
2nd class	6	Passenger capacity 392; side seats and central passage.
3rd class	17	Passenger capacity 462; longitudinal seating.
Other coaches	19	Of which 4 are luggage, mail and brake and 5 are luggage and brake.
	45	

Wagons

	No.	*Dimensions.* ft. ft. ft.
Steel bogie covered goods wagons	15	35 × 9 × 7
,, ,, M.S. wagons	16	35 × 9 × 3½ (sides)
,, ,, flat ,,	1	35 × 9
,, 4-wheeled C.G. wagons	9	20 × 9 × 7
,, ,, M.S. ,,	4	20 × 9 × 3½ (sides)
,, ,, flat ,,	1	20 × 9
	46	

Special Service

Locomotive coal wagon	1
Break-down wagons	2

Trolleys
10

The 1915 report gives 12 passenger and 2 shunting locomotives.

All rolling stock is fitted with Westinghouse automatic brake-gear, and first and second class coaches are lit by the Stone electric system. Passenger coaches have side buffers and the Standard Coupler Co.'s central coupling.

Trains and speed.—In October 1915 there were 8 trains covering the whole distance each day, six of which were express. The average time taken by the express trains was 3 hrs. 40 min., the fastest time being 3 hrs. 30 min., which gives an average speed of 31½ m. per hour including stops. The slow trains average 7 hrs. 18 min. for the journey, speed averaging 15¼ m. per hour including stops.

Separate goods trains are run only occasionally, goods wagons being attached, as a rule, to passenger trains as found necessary.

The locomotives of each section run in their own section only, and there is always a change of engines at Shumchün.

Workshops.—The workshops for the British section are at Hung Hom (m. 1), and those of the Chinese section at Tai Sha Tau (m. 110·97). Both are fairly well equipped and could deal with any ordinary running repairs.

Stores.—All stores for the British section are concentrated at the Railway Locomotive and Carriage Works at Hung Hom. They are in ample quantity.

The main stores of the Chinese section are at Tai Sha Tau where about six months' supply is maintained. A small stock is also kept at Sheklung.

Stations.—There are 37 stations including halts and the two termini, nine being in the British section. They are all of the simplest character except the terminals. Platforms are 6 in. above rail level, except at Tai Sha Tau where they are 2 ft. 3 in. In the Chinese section the average distance between stations with loops and sidings is 7 miles, and this distance is divided by a halt having a booking office and timber-built waiting room but no loops or sidings. The new terminal station at Kowloon was opened in March 1916. It has commodious buildings and accommodation for passengers and goods traffic to meet modern requirements.

mileage[1]	*List of Stations.*
0	Kowloon.
1	Hung Hom.
2·10	Yau Ma Ti.
7	Sha Tin.
13	Tai Po (Taipo Tung).
14	Tai Po market.
19	Fan Ling.
20	Sheung Shui (Halt).
22	Lo Wu
22·24	Shum Chun (Shumchün).
23·24	Shum Chun market.
27·07	Po Kat.
30·35	Li Long (Halt).
34·47	Ping Wu.
37·82	T'in T'ong Wai (Halt).
37·87	Shek Ku (Halt).
42·55	T'ong T'au Ha (Tongtowha).
45·17	Lum Ts'un (Halt).
49·83	Cheung Muk Tau and Shek Ma.
54·77	To Tong (Halt).
57·67	Sheung P'ing and Muk Lun (Sheungping).
61·23	Wang Lik.
65·23	Nam She (Halt).
68·83	Sai Wu (Halt) (Saiwuhü).
70·82	Shek Lung (Sheklung).
74·63	Shek Lik Kau (Halt).
76·20	Shek Tan (Shektan).
78·72	Shek Ha (Halt).
81·97	Sin Tsun (Sintsün).
85 43	Nga Wu (Halt) (Ngayiu).
87·36	T'ong Mei (Tongmihü).
89·30	San T'ong (Halt) (Suntong).
93·88	Nam Kong (Namkong).
98·39	Wu Chung (Halt) (Wuchung).

[1] The extension of the line to Kowloon Point will necessitate a trifling adjustment of the mileage.

mileage	
103·07	Che Pi.
107·34	Shek P'ai (Halt).
109·47	Tung Shan (Depôt).
110·97	Tai Sha Tau.

Country bordering the railway

In general the country traversed by the line is hilly and rugged with little cultivation in the British section, open, fertile, and cultivated to the last inch in the Chinese section. The line could be used by infantry throughout its length; it would be difficult for mounted men especially at the bridges and only usable by guns and carts with great labour. Many of the streams crossed are fordable near the railway bridges and only the larger rivers would cause considerable delay. With the exception of the Frontier Road from Kowloon to Taipo Tung, roads in the ordinary sense do not exist, the ordinary means of communication being paved paths unsuited for wheeled traffic.

The British section

Kowloon to Taipo Tung (m. 0 to 13). From Kowloon terminus the line runs easterly for a short distance, and then curves N. to Hung Hom (m. 1), where are the workshops of the section. The line now leaves the residential part of Kowloon and enters some low decomposed granite hills, continuing northward by alternate bank and cutting and one short tunnel to the entrance to Beacon Hill tunnel at m. 3·75. This tunnel pierces a range of high and steep hills and leads out on to the head of Tide Cove, an arm of the sea running up from Tolo Harbour. The line then follows the shore of Tide Cove, and traverses some difficult country, alternating rapidly between bank and cutting. The hills to the west are steep and rugged, and from 1,000 to 1,500 ft. high. Still keeping close to the shore the line curves to the west, and passing through three short tunnels enters Taipo station at m. 13. Taipo is a flourishing market town. The country in this section is

difficult and not passable for wheeled traffic, but the Frontier Road could be used by troops of all arms. The new Kowloon station has substantial buildings of brick and granite, and a station yard covering 11½ acres. It is built on land reclaimed from the sea, with excellent sea frontage, capable of accommodating ocean-going steamers.

Taipo to Shumchün (m. 13 to 22·24). The line leaves the sea and continuing N. passes through a long cutting into a valley about a mile wide, which it follows till it reaches the Shumchün River at m. 22. The river marks the boundary of the British Leased Territory, and the bridge over it is the limit of the jurisdiction of the British section of the line. Shumchün station lies a few hundred yards farther to the north. Shumchün is a populous town of growing importance (see *Gazetteer*). This section generally is passable by both infantry and cavalry, but wheeled traffic would find it difficult especially in wet weather.

The Chinese section

Shumchün to To Tong (m. 22·24 to 54·77). The line continues in a northerly direction, and leaving the fertile valley of the Shumchün River enters broken and hilly country at Po Kat (m. 27·07). The summit of the watershed of the Shumchün River is reached about m. 32, at a point 196½ ft. above the Shumchün level. These hills are covered with small fir trees and often intersected by deep clefts and ravines. With the exception of a short break from T'in T'ong Wai (m. 37·82) to Lum Ts'un (m. 45), where a small and very fertile valley is crossed, this type of country continues to To Tong (m. 54·77). The country throughout this section would be difficult for movement of troops, the clefts and ravines hampering progress considerably.

To Tong to Shek Ha (m. 54·77 to 78·72). The hills recede and the line enters a low, gently undulating country which is very fertile and everywhere cultivated. Rice, oranges, sugar-cane, mulberry trees, and vegetables are the chief crops. As Sheklung (m. 71) is approached the country becomes flat and

occasionally marshy and liable to flood. The cultivated land around is 7 to 8 ft., and near the East River channels 11 ft., below the highest known flood levels. It is protected by high bunds or banks, which, however, are frequently breached by the floods. The railway embankment is 2½ ft. above the highest flood level, being in places 24 ft. or more in height, and averaging 14 ft. for many miles. Similar country extends to Shek Ha (m. 78·72). For description of the important town of Sheklung see *Gazetteer*.

Numerous creeks and side channels, besides the main channels of the East River, intersect the country, and would hamper the movement of troops in this district.

Shek Ha to Tai Sha Tau (m. 78·72 to 110·97). Rising ground is now encountered, and the line enters hilly and broken country of the same nature as that between Shumchün and To Tong, with the exception that the hills are not so close to the line. A range of high mountains lies some 12 to 15 miles to the north of the railway. Well-cultivated fields and many villages are passed in this section. The loop-line to connect this line with the Canton–Hankow Ry will take off from Tung Shan Depôt (m. 109·47).

The country alongside the line is only passable for infantry. The station at Tai Sha Tau is beside a narrow creek with 8 ft. of water at high tide and 3 ft. at low tide. Only lighters can come alongside at low water. A track 150 yds. long runs on the stone bund, and is served by a 10-ton crane capable of lifting packages on to trucks. There is a small wooden landing jetty some 30 ft. long and 15 ft. wide. At high water the two railway launches can come alongside, but at low water a gig is used and the launches lie ¼ mile out.

Branch Lines

Fan Ling to Shatowkok : 7¼ miles. Single line of 2 ft. gauge ; track consists chiefly of old 50 lb. rails and fastenings originally used in construction of the main line. Bridges are small and unimportant. Leaving Fan Ling (m. 19) the line runs for 4 miles beside the new road and afterwards down a winding

valley (gradient 1 in 45 and curves of 150 ft. radius) to Shatowkok, a town at the head of Mirs Bay.

Namkong to Lo Kong Hü: 4½ miles. Privately built by a Lo-kong merchant with material obtained from the Chinese section of the main line. Single line of 2 ft. gauge. The rails are 22 ft. long and 2¼ in. high by 2¼ in. at base, single-headed. The line has one engine of German make with coal capacity for 7 or 8 miles, two open coaches capable of seating 24 men each, and 3 wagons with floor space 11 ft. by 5 ft. and two with floor space 8 ft. by 5 ft. The couplings are very flimsy, and would hardly stand a full load.

The line runs from Namkong (m. 93·88) to the group of villages in which is Lo-kong, along the bank of a river with little other than natural embankment and no cuttings. The bridges are 12 in. timber with abutments generally of stone. The journey takes about three-quarters of an hour.

Lo-kong is a market town of some 150 houses.

Sintsün to Tsengshinghsien: 18 miles. A similar light railway to connect Tsengshinghsien with the Canton–Kowloon Ry at Sintsün (m. 81·97) was projected by a group of Canton merchants, and work was reported to be about to commence in 1915.

Tsengshinghsien, P., is a small walled town E. of Canton on the right bank of the Lungmoon river. Its walls are about a mile in length and 36 ft. high according to Chinese authorities. It has a post office of second-class status.

Connexions with other railways

The loop-line which is to connect the Canton–Kowloon and Canton–Hankow railways, as already described, still awaits construction owing to opposition on the part of the Cantonese.

For the proposed line to connect the Chaochowfu–Swatow Ry with Shumchün or Sheklung see p. 158.

Sunning Railway

The Sunning district which lies W. of Ngaimoon at the mouth of the West River has long been a place of residence for wealthy Chinese who have returned from America. One of

these, Mr. Chin Gee Hee, a man with thirty years' experience of railway construction in California, conceived the idea of connecting Canton with some point on the coast which as a harbour might compete with Macao. Accordingly, towards the end of 1906 he founded a company called the Sun-ning Railway Company, Ltd., with a capital of about £266,000, of which £200,000 were subscribed by Chinese living in America, and the balance by Chinese merchants in Hongkong. The railway was to run from Kungyifow on the Tam-kong River (to which point launches run from Canton) to a harbour site known as Sam-ga-phoi, south-west of Macao. An extension of the line was to be made subsequently to Kongmoon on the West River, and thence to Fatshan on the Canton–Samshui line, while another extension was contemplated 80 miles south-west to Yeungkong. Should the extension to Fatshan be carried out the line would have a strategic importance for any force advancing on Canton from the south.

The first section from Kungyifow to Sunning (about 15 miles) was opened to traffic in January 1908. In July 1909 the line had reached Towshan, about 6 miles from Sam-ga-phoi. Difficulties then arose with the Canton–Hankow Railway, which had certain rights at Kongmoon, but these were surmounted, and the line was completed to Kongmoon by January 1912. In the next year 3 more miles were added from Kongmoon to Pak-kai on the bank of the West River. The line has been designed, financed, and constructed entirely by Chinese, and has proved a commercial success.

General description of the line

The total length of the two sections at present is 70 miles, reckoned at 3 *li.* to the mile.

The track.—The line is single throughout and of standard, 4 ft. 8½ in., gauge, laid with 60 lb. steel rails bought in Germany, Belgium, and America.

Curves and gradients.—Most of the gradients are low, with the exception of one or two curves of heavy grade. Some very sharp curves have been made to avoid graves

Bridges.—No engineering difficulties have been encountered. The streams are crossed on strong wooden bridges, and the broad Tam-kong River is crossed by a train-ferry.

Ferry.—The Tam-kong is ¼ mile wide at Ngauwan, the ferry station, with a current of 1½ knots and a depth of 6 fathoms in mid-channel, subject to a rise and fall of 6 ft. at spring tides. There is apparently[1] one ferry, which carries four or five cars besides an engine, the remaining cars of the train being left behind and others picked up on the other bank.

Tunnels.—There are no tunnels on the line.

Rolling stock.

Tender locomotives

No.	*Description.*
3	Henschel u. Sohn, Cassel.
11	Baldwin, Philadelphia. Four of these are small and for goods traffic only. The remaining seven have triple pairs of driving wheels and cost $9,500 each.
Total 14	

It is reported that in August 1917 an order had been placed for new American locomotives.

	No.	*Description.*
	Carriages	
Passenger	40	Including at least five 1st class (Pullman) and at least two cars surmounted by a sort of conning tower with loop-holes.
	Wagons	
Goods	60	All on bogies. One-half without sides or roof.
Tipping trucks for ballast, &c..	20 to 30	
Total	120 to 130	

[1] It appears that a much more elaborate ferry was contemplated. Details given in *Maritime Customs, Trade Reports*, Part II, Vol. IV, 1911, show that contract was placed in Hongkong for a ferry 350 ft. long, 55 ft. wide, and 7 ft. deep, with 3 sets of rails to carry 15 cars on each journey. The ferry was to be moved across the river by means of chains and pulleys, and to be fitted with pumps for raising and lowering the hull by emptying and filling water tanks so as to adjust the level of the ferry to that of railhead. The *Military Report on Chinese Railways*, 1913, speaks of two such ferries having been supplied, but adds that they were not in operation in January 1913.

Workshops.—The workshops at Kungyifow are capable of repairing rolling stock, casting wheels, and fitting the wooden uppers of goods wagons to imported chassis.

Stations.—It is reported that in 1917 considerable improvements were made in the station and yard equipment of the road. The names in the appended list of stations are given according to the railway spelling, post office spelling where possible being given in brackets.

List of Stations

(A) *Tou-shan to Kung-yik*

mileage, approx. (reckoned at 3 *li.* to the mile)	
0	Tou-shan (Towshan).
2·11	Luk-tsun.
5·24	Chung-lao (Chunglow).
7·02	Hung-ling.
10·90	Tai-tong.
13·45	Sze-kao (Szekow).
14·66	Ha-ping.
16·37	Ng-shap (Ngshaphü).
17·83	Tsung-long.
19·23	Tai-hung.
21·00	Tung-moon (Sunning).
21·87	Ning-shing.
23·92	Pan-kong (Pankong).
25·47	Tung-hang (Tunghang).
28·57	Shui-po (Shuipo).
30·60	Chan-pin.
32·03	Tai-kong (Taikonghü).
32·85	Man-fook (Manfuktze).
36·20	Kung-yik (Kungyifow).

(B) *Kung-yik to Pak-kai*

0	Kungyik (Kungyifow).
3·12	Mak-kong (Makhong).
5.40	Ngou-wan (Ngauwan).
7·67	Tai-wong-she (Taiwongshi).

mileage, approx.	
9·55	Sze-tsin (Szetsin).
10·78	Pak-miu (Pakmiu).
11·99	Sha-chung.
14·26	Nan-yeung.
16·53	Tai-chak (Tatseh).
19·36	Lin-tong (Lintong).
21·09	Fun-shui-kong.
23·34	Wai-man-moon (Sunwui).
24·71	Wui-shing-tung.
	Teh-wui.
29·80	Kong-moon (Kongmoon).
32·48	Pak-shek.
33·80	Pak-kai.

Country bordering the railway

Towshan to Kungyifow.—Towshan is a hamlet about six miles inland on a tidal creek called Samgaphoi (San-chia-hai), which has sufficient depth to admit junks and launches, but not larger vessels. Without extensive conservancy works it could never develop into a port of any considerable size. From Towshan the line runs at first through hilly and somewhat barren country to Sunning (m. 21); see *Gazetteer*. From here the surrounding country is fertile, well cultivated, and populous. For Kungyifow see *Gazetteer*.

Kungyifow to Pak-kai.—The old line serves this new section as far as the junction station of Makhong (m. 3·12), from which a branch line runs to the ferry at Ngauwan (m. 5·40). Here the Tam-kong River is crossed by a train-ferry (see p. 153), and the line runs through a fertile and populous country, making a gradual curve to Sunwui (m. 23·34); see *Gazetteer*. The line now passes hills on the right and runs on to Kongmoon through a fertile and highly cultivated country, thickly populated and studded with well-built villages. Rice and vegetables are the staple crops. Kongmoon (see *Gazetteer*) is reached at m. 29·80, and the line runs through the city on

an embankment which ends at the West River front about 300 yds. above the Custom House. Here is the anchorage for steamers whose draught will not permit their entrance into the congested Kongmoon creek; and the railway company has a bunded frontage and landing-place.

Projects and extensions.—As already stated it is proposed to extend the Sunning railway to Yeungkong (see *Gazetteer*), a port about 80 miles south-west of Sunning. A sum of $800,000 was raised for this purpose, and work was begun early in 1917. In August 1917 it was reported that orders had been recently placed with American mills for rails and fittings for 20 miles of this extension, which would take the line as far as Pak-sha.

No steps have yet been taken towards carrying out the extension to Fatshan, which would pass through a very rich and populous district; nor towards the further extension, which was contemplated, to the frontier of French Indo-China, tapping the Pakhoi district en route.

Swatow–Chaochowfu (or Chao–Shan) Railway

The concession for building this line was granted in 1903 to a Hakka merchant named Tee Yik Nam, a public-spirited man anxious to improve local conditions. A company was formed under the style of The Chaochowfu–Swatow Railway Co., Ltd., with a capital of £200,000, of which the promoter furnished three-quarters. The contract for building the line was given to Noya Akusawa, a Japanese of Formosa, and construction was begun by Japanese engineers under the direction of the Mitsui Bussan Kaisha in 1904. The line was opened to traffic in November 1906. A small extension was made in 1908 from Chaochowfu to the station of Ikoi, which serves as junk-port on the Han River for the city, a distance of 2 to 3 miles; and there is a proposal to extend the line at the Swatow end as far as the harbour, which would include the construction of a costly bridge over the Swatow arm of the Han River. The cost of construction is said to have reached £330,000, and no dividend has yet been paid to the shareholders. The traffic is

mainly passenger, the Chinese preferring the slower but cheaper method of river transport for their goods.

Throughout its length the line is practically level, with no deep cuttings; and the greatest difficulty encountered in construction was the number of small streams which had to be passed.

General description of the line

The track.—The length of the line is 26½ miles. It is of standard, 4 ft. 8½ in., gauge and single throughout. The embankment is mainly composed of earth dug up close to the line, and ballast is sparingly used. Owing to the frequent floodings of the surrounding country many parts of the embankment are being washed away, whilst repairs are only superficial.

Curves and gradients.—Gradients are gentle and curves comparatively few.

Tunnels.—There are no tunnels.

Bridges.—There are only two large bridges, one 180 ft. and the other 120 ft. in length, the former spanning the branch of the Han River about 2 miles from Swatow.

Rolling stock.

Locomotives

3: Built by the American Locomotive Co.

Carriages

First class	3
Second class (converted from third class)	2
Third class	16
	21

Wagons

Brake vans	4
Covered wagons	24
Open wagons	26
	54

The wheels and axles of the cars and wagons are of British make: the wooden parts were imported from Japan, and the cars put together in Swatow. Their condition is not good.

Trains and speed.—There are six trains per day, and the

whole journey takes 1 hr. 27 min. on an average, the average speed, including stops, being 18¼ miles per hour.

Workshop.—There is one workshop at Swatow.

mileage (approx.)	*List of Stations*
0	Swatow.
6	Am Pou (Ampow).
8½	E Bue (Ebue).
10½	Chai Tong Chi (Tsaitangshi).
13½	Kuah Tsha.
17½	Fow Yong (Puyeung).
21½	Fong Kai (Fungkai).
24	Chao Chow (Chaochowfu).
26½	Yee Kai (Ikoi).

Country bordering the line

The line runs through flat delta country with low hills in the distance on the west side from Swatow to Kuah Tsha, and on the east side from Ebue to Tsaitangshi. The soil is light but productive, and gives two crops of rice. Other cereals, too, are extensively cultivated, besides such crops as sugar, fruit, and indigo. For the chief towns served by the line—Swatow, Ampow, Fungkai, and Chaochowfu—see *Gazetteer* under Swatow and Chaochowfu.

Projected Railways in Kwangtung

Numerous projects for railway construction in Kwangtung have been mooted from time to time, but they are almost all in suspense at the present moment, and are likely to remain so until a more favourable opportunity for raising the necessary capital arrives.

Taking them from east to west the first is

(*a*) **Chaochowfu to Canton–Kowloon Railway.** This is part of a project to connect Amoy and Canton by railway, and a survey was made in 1906, the route taken in Kwangtung being Chaochowfu–Kityang–Puning–Lukfung–Hoifung–Kungping–the Sam-to-chuk River which is followed to Waichow–

Poklo–Sheklung—about 200 miles. A Chinese company was promoted for the purpose in 1914, but the matter proceeded no further, and in 1914 negotiations were opened by the Chinese Government with Messrs. Pearson for its construction.

(*b*) **Canton–Nanchang.** Negotiations were in progress in 1914 for a railway from Canton to Nanchang in Kiangsi, and from Chaochowfu westward to meet it. It was reported that in 1915 Chinese engineers had started a survey from Nanchang via the Meiling Pass to Shiuchow on the Yüeh–Han Ry.

(*c*) **Canton to Hoyün.** A survey has been made by Chinese engineers for a line from Canton to Hoyün on the East River, the idea being to extend it to Lungngan and Tingnanting in Kiangsi; but it is pointed out that such a line would pass through very poor country and would be very costly.

(*d*) **Canton–Macao.** A concession was granted to a Portuguese Syndicate in 1902 for a railway from Macao to Fatshan on the Canton–Samshui Ry (about 75 miles), but it was not taken up. A survey was made from Canton to Macao in 1909; and an attempt was made to negotiate a loan from British capitalists in 1913 for a railway passing through Chanchuen, Jungki, Heungshan, and Tsinshan, about 140 miles. A survey as far as Shekki was completed, but the necessary capital has not been forthcoming.

(*e*) **Samshui–Nanning.** There is a project to build a railway along the West River through Fungchünyün–Wuchow–Sünchow–Nanning, about 445 miles. This line would have more strategic than commercial value.

(*f*) **Sunning Railway extensions.** It is part of the company's plan to extend this railway from Kongmoon to the Canton–Samshui line at Fatshan on the one hand, and westward on the other. The extension towards Yeungkong in the latter direction has already begun, and it is suggested that it should eventually be continued through the Pakhoi district to Nanning on the West River.

(*g*) **Kwangchowwan to Nanning.** One of the many French schemes is to build a railway from Kwangchowwan to Limchowfu, and thence to Nanning, whence connexion could be

made via Lungchow with the Langson–Hanoi Railway in Tonkin, and with the proposed Nanning–Yünnanfu line.

(*h*) **Yamchow to Yünnanfu.** Another French project is the proposed line from Yamchow to Nanning, and thence up the Yu Kiang valley by Poseh to Yünnanfu or to Kütsingfu on the projected line from Yünnanfu to Chungking. An agreement for a loan for this line was made in 1914 between the Chinese Government and the Banque Industrielle de Chine. The terminus would be at Lungmoon, the port of Yamchow. It was reported late in 1914 that work had been started on a line to connect Yamchow with Limchowfu near Pakhoi.

(*i*) The Siems-Carey agreement of 1916, which gave the American contractors the right to construct over 2,000 miles of railways in China, includes a scheme for the construction of a short line in Hainan from Hoihow to Lokwei near Kachek.

CHAPTER XII

THE CANTON DELTA

General description—Principal Channels and Creeks—West River (Lower section)—Pearl or Canton River.

General Description

The Canton Delta, one of the richest and most populous districts in China, comprises all the country between the Canton and the West Rivers. It consists of flat alluvial land relieved by a number of abrupt isolated hills of disintegrated granite, and threaded by innumerable creeks. The land has been formed by the gradual accumulation of river deposits aided by extensive reclamation, and the abrupt hills were formerly islands in the sea. The delta is still growing continuously: and Kongmoon, which was once at the mouth of the West River, is now about 30 miles inland. The northern limits of the delta are not clearly defined; but they may be regarded as extending to the Lupas Creek, which is continued in the Paknai River to Canton. The stretch of deltaic land is augmented on the east side by the extensive delta of the East River; while the Tam Kong or Sunchong River flows into its western mouth.

There are many large channels traversing the delta in all directions, and forming the highways of traffic; and besides these there are numerous small creeks navigable at high tide by small flat-bottomed boats (*sampans*), which draw 6 to 12 inches, but owing to the muddy nature of the bottom they are only fordable with difficulty at low tide.

Where the smaller creeks leave the main channels there will generally be found wooden barriers, consisting of a double row of strong wooden piles, driven into the bed of the creek about 2 ft. apart and bound by ribands nailed horizontally across them. An opening is usually left in the middle from 10 to

15 ft. wide, which can be readily closed by a gate formed of two long poles fitted with iron spikes. The original object of these barriers was to prevent the larger pirate junks from entering the creeks by night and raiding the villages. They are now little used and are falling into decay, and they could, moreover, be easily removed by saws or axes. The reclamation which is continually in progress, tends to alter the depth and even the course of the waterways, thus adding to the difficulties of navigation in the delta.

Much of the delta land, particularly that lying east of Taileung, is below the level of the sea at high tide, and is protected by high embankments ; and the whole country has suffered periodically from devastating floods in seasons of exceptional rainfall. It is, nevertheless, densely populated, and the waterways are lined with countless villages and many large towns. The land is industriously cultivated, mainly for rice, vegetables, and mulberry trees which feed the silkworms The rice district is chiefly on the east side of the delta, and the important silk-producing area is west of Taileung. Communications are practically confined to the waterways, the only roads being the narrow tracks which run along the embankments and paddy bunds.

The main entrances to the delta channels from the sea, from west to east, are the Ngaimoon, Fotomoon, Niwanmoon, Motomoon, Wangmoon, and the Canton River. The Motomoon, approached by the Broadway, is the direct steamer entrance to the West River.

Foreign vessels trading with the treaty ports and ports of call are limited to certain channels :

(1) The Pearl River : used by vessels running from Hongkong and foreign ports to Canton.

(2) The Wangmoon–Sailam Channel–Mahning Junction Channel–West River ; steamers from Hongkong to the West River ports usually take this route.

(3) Motomoon–West River : steamers calling at Macao take this route.

(4) Pearl River (or Hill Passage)–Saiwan Channel–Tam-

chow Channel–Taileung Channel–Mahning Junction : this is the route for steamers from Canton to the West River ports.

Native shipping is not confined to any particular waterways, but there are certain routes usually followed by the main stream of traffic :

(1) Canton to Heungshan, via Chanchuen, Ho-kao, Jungki, Siulam, and Kong-hao.

(2) Canton to Kongmoon and Sunchong, via Chanchuen, Laklow, Kumchuk, Kongmoon, Sunwui, and the Tam-kong River.

(3) Canton to Samshui, via Moneypenny Creek, Lanshek, Tzetung, Siutong, and Sainam.

Passenger traffic on a large scale is carried on in these routes by means of junks—about 80 ft. long, 20 ft. broad, and $2\frac{1}{2}$ ft. draught—towed by steam launches, of which as many as 250 are in daily use.

The Principal Channels

It is not practicable to give an exhaustive list of all the delta channels ; and only a few of the principal waterways are described below with their connecting links.

Of these the **Tamchow Channel** is of special geographical interest, as it practically bisects the delta running diagonally from Samshui south-east to Junk Fleet Entrance, the common entrance of it and the Wangmoon into the Canton River. It communicates, moreover, with almost all the important creeks and channels above the Wangmoon, and may be regarded as the backbone of the delta river system.

miles (approx.)	
0	**SAMSHUI** (see *Gazetteer*). From here to Tzetung the channel is sometimes called the Fatshan Branch, and from Samshui to Sainam it is also known as Sainam Reach. The direction here is eastward.
3·2	**SAINAM** (see *Gazetteer*), on the left bank. Here the channel bends south-east. A shallow creek leading north-east to Samkong comes in on the left bank.

miles (approx.)	
7·5	*Siutong*, P., R.S., on the l. bank. The channel now bends southwards.
11·3	*Tzetung*, P., on the r. bank. The channel here bends sharply east and winds in a south-easterly direction. It is joined on the south by the large creek known as the Shuntak Branch. The town of Tzetung is in the angle formed by these two creeks.
14	*Shahow*, S., P., on the l. bank. Here a creek from Fatshan joins the channel.
17·3	*Shekwan*, P., a town on l. bank, celebrated for its pottery.
19·5	*Lanshek*, P., on l. bank.
21·6	The Moneypenny Creek comes in on the l. bank from the Back Reach of Canton River.
29	A stake barrier on the l. across the mouth of the creek on which is the town of **CHANCHUEN** (see *Gazetteer*).
32·5	*Tsz-nai Island.* A nodal point of the delta where several important channels meet. On the north-west of the island is a short creek connecting the Tamchow and the Chanchuen Channels. Brick Kiln Creek joins the Tamchow Channel on the west side ; and a mile further south, off Essex Point, the Saiwan and McCleverty Channels join on the south-east side of the island.
34	*Essex Point*, on the northern end of a small narrow island which divides the Tamchow Channel.
40	*Bullock Point* on the r. bank. The combined waters of the Taileung Creek and the Taileung Channel come in on the r. Just below this junction two small islands—Shell Island and New Island—split up the channel, and opposite the passage between them is the entrance to Jungki Junction on the right, and a creek (with water-gate) leading to Tamchow on the l.

miles (approx.)	
42·5	**Tamchow,** P.
46·5	*Wan-tung Junction* on the r. connects the Tamchow with the Kerr Channel; and on the l. are North Centre Junction and South Centre Junction, two creeks flowing round a reclaimed island and connecting the Tamchow Channel with the entrance of the Tai-kok-tau Channel.
49	A creek on the r. bank communicating with the Wan-tung Junction.
61	The Tamchow Channel and the Wangmoon unite in the Junk Fleet entrance north-east of Cone Island.

Principal creeks joining the Tamchow Channel on the north-east or left bank

Samkong Creek, a shallow creek navigable by light-draught boats leading from Sainam north-east to Samkong (P.), and on to Kunyiu (P.), on the Lupao Creek, a total distance of about 15 miles.

Fatshan Branch from Shahow S., running north-east and then east to **FATSHAN** (see *Gazetteer*), about 7 miles. From here it bends sharply north and then winds east to Parker Point at the southern end of Canton Back Reach. Other creeks leading from Fatshan to Canton are mentioned in the Gazetteer.

Moneypenny Creek winds north-east from a point about 2 miles below Lanshek to the Fatshan Branch just east of Hyacinth Island. It is stated to have a depth of not less than 10 ft.

Chanchuen Channel. At the north-west corner of Tsz-nai Island there is a small creek, about ¾ mile long, leading north-east into the Chanchuen Channel. This channel runs in a north-westerly direction to Chanchuen (see *Gazetteer*), about 2½ miles, and then continues in a winding course northward for about 7½ miles under the name of the Chanchuen Creek. It then joins the Hamilton Creek, which connects it with

Blenheim Passage, distant another 2½ miles. The Chanchuen Creek has a least depth of 4 ft., and the other channels are deeper. At low-water season deeper water is found in the Fu-lu-kong Creek, which makes a loop on the east side of the Chanchuen Creek above the city. This is an important route for native traffic between Canton and the central towns of the delta.

Saiwan Channel. This important channel, used by steamer traffic, connects the Tamchow Channel, south of Tsz-nai Island, with the Canton River. It has a minimum depth of 10 ft., but is obstructed by stakes and barriers in several places. The distance from the Tamchow Channel at Essex Point, by this waterway is about 12 miles to Forbes Point at the junction of Hill Passage, and 14¼ miles to Bedingfield Point, south of Wardroper Island in the Canton River. The town of Sai-wan is on the north bank just east of Tsz-nai Island.

Principal creeks joining the Tamchow Channel on the right bank

Shuntak Branch. The Shuntak Branch joins the Tamchow Channel on the south at Tzetung, and it flows in a winding course south-east to the Taileung Channel opposite Jungki, a distance of about 30 miles. In the first part of its course it runs due south to Kwanshan, P., on the right bank, then bends east-south-east passing the towns of Shatow E., P., Lungkong, P., all on the right bank, to the mouth of Brick-kiln Creek (a distance of 16½ miles). Here it turns south by a narrow winding channel about 3 miles long (known as Laklow Creek), passing the large town of Laklow, P., on the left, with Lungshan Tung, P., on the opposite side. At the end of this creek it meets the Kumchuk Creek on the right, and itself flows south-east to the Taileung Channel, by the entrance to which is the town of Kwaichow, P., on the west bank.

Brick-kiln Creek. This creek, which is tidal with a rise and fall of 4 to 5 ft., runs from the Tamchow Channel opposite Tsz-nai Island due west to the Shuntak Branch, a distance of 7·2 miles. About half-way on the south side is the town of

Wonglin, P., from which the Taileung Creek runs south-east to the junction of the Taileung and Tamchow Channels. The Taileung Creek is 9·8 miles long, 80 to 150 ft. wide, with a general depth of 5 ft. at low water. It passes north of the important town of Taileung or Shuntak (see *Gazetteer*), and two small creeks leave it on the south side : (1) running past Taileung on the west to the Shuntak Branch, and the other approaching the south-east corner of the city.

Taileung Channel. This channel, which is used by river steamers, connects the Tamchow Channel at Bullock Point with Yellow Reach. Its direction is westerly to about 2 miles beyond Jungki, where it turns sharply south, and its length is about 9½ miles. Shuntak Creek joins it on the north side about 4 miles west of Bullock Point, and the town of Jungki, P. ; a passenger stage for river steamers is situated on the south bank at this point. Jungki is one of the centres of the silk industry.

Jungki Junction opposite Tamchow and Wantung Junction, 4 miles further down, connects the Tamchow Channel with Kerr Channel.

Wangmoon, Sailam Channel, and Junction Channel. These three channels form a continuous route across the delta, which is used by river steamers running from Hongkong to the West River. The Wangmoon, one of the main entrances of delta, runs west from Junk Fleet Entrance for about 7 miles to the point where it receives a number of creeks including the Kerr Channel, Sailam Channel, and Nemesis Creek.

Sailam Channel runs from this point north-west to Yellow Reach, a distance of 17½ miles. At 4½ miles from its mouth is the Kong-hao Creek, about 5 miles long, leading south past the large town of Kong-hao to Nemesis Creek. Sailam Channel passes north of the large town of Siulam (or Sailam), P., about 1½ mile below Yellow Reach. Yellow Reach is a short broad reach running northward, and receiving at its southern end Junction Channel and its southern loop, Junction Bend. Junction Channel or Mahning Junction runs west-

north-west from Yellow Reach to the West River, at First Cliffs, a distance of about 9 miles. About 4 miles below First Cliffs on the north bank is the town of Mahning (Ma-ning), a port of call for river steamers.

The **Kerr Channel,** which runs from the Wangmoon to Yellow Reach, north of the Sailam Channel, is about the same length as the latter, but shallower and less safe.

The principal creek on the south of the Sailam Channel is **Nemesis Creek,** which winds in a south-westerly direction from the Wangmoon to the West River at Encounter Point. It receives the Kong-hao Creek on its north bank, and passes through the important town of Shekki (see *Gazetteer*). Its length is about 19½ miles ; its least depth is 5 to 6 ft., and it is used by junks trading between the Canton and southern West River districts.

Lung-kong Creek forms a loop with the West River, leaving Junction Channel opposite Mahning, and joining the West River at Kep-siang Island, about 15 miles farther south.

The West River (Lower Section)

The main entrance to the West River is the Motomoon, which is approached by the Broadway (see p. 84), and is one of the steamer routes to the West River ports. On both sides of this entrance are islands, enlarged by reclaimed land and surrounded by creeks. Moto Island, which gives its name to the Motomoon, is on the east side of the channel, which is split into two off Moto fort by a tongue of reclaimed land, the more easterly branch leading to Nemesis Creek, and the other being the main channel of the West River. From Chuk-chau Island to Samchowhü the navigation of the river is fairly easy. The country traversed is populous and highly cultivated, and the banks are lined with numerous towns and villages. There are quite a number of low hills on both sides of the river, particularly between Kongmoon and Kowkong. The general direction of the stream from Samshui to the sea is south-south-east, the distance (measured on the chart) from Samshui Reach to Moto Island being about 65 miles. The

following table gives the principal points passed on the journey up stream :

miles (approx.)	
0	*Moto fort*, on the l. bank, the most westerly point of Moto Island.
7	*Chuk-chau Island* on the r. bank. A sandbank extends here from the eastern bank, and the channel of the west side has a least depth of 7 to 8 ft. Above the island is **Moorhen Creek,** running north-west to the Mukchow River, and largely used by junks trading with the Sunning district via Mukchow Creek.
12·5	*Kep-siang Island*, towards the l. bank, behind which is a creek leading north-east into **Nemesis Creek** and **Lung-kong Creek** leading north (see p. 168).
17	Bifurcation of the West River, the western arm, called the **Mukchow River,** flowing in a south-westerly direction.
23·5	*Ngoihoi*, P., on the r. bank. Here the river divides round *Chau-lin Island*, the main channel continuing north-west along the east side, and another channel bending in a westerly direction past Edgell Island and the mouth of Kongmoon Creek. A third channel, known as **Sandpiper Creek,** makes a loop northward passing *Kuchen*, P., on the east bank, and rejoining the West River opposite Plover Island. *Hotong*, P., is on the l. bank of the main channel opposite the centre of Chau-lin Island. *Chowkün*, P., is a town on the r. bank just above the junction of the two channels north of Chau-lin Island. It has a stone pier.
33	*Plover Island* (Chü-tau-shan) in mid-stream. The main channel lies on the east side of it.
37.5	*Staunch Island*, in mid-stream, submerged at high water and marked by a light. Between it and First Cliffs is the entrance to *Junction Channel* on the east side (see p. 168).

miles (approx.)	
40·5	*Fa-chiau Island* in mid-stream. East of it is **KUMCHUK,** P., a port of call, at the entrance of **Kumchuk Creek.** Kumchuk Creek winds north-east to the Shuntak Branch at the entrance of **Laklow Creek.** The level of Kumchuk Creek is below that of the West River, and in the high-water season difficult rapids are formed at its mouth. These can, however, be avoided by taking a creek east of Kumchuk which connects Kumchuk Creek and Junction Channel. Two miles above Kumchuk on the l. bank is the large town of **KOWKONG**, P. (see *Gazetteer*).
43	*Hok-shan Island*, the southernmost of two long low islands in mid-stream.
48	*Kulo*, P., a passenger stage on the r. bank, in a tea-producing district. Opposite it on the l. bank are *Hotsing*, P., and *Hahü*, P.
50	*Samchowhü*, P., on the r. bank. Above this town *Rattler Island* and *Tai-ping-chau Island* block the river; and the channel, which becomes rather shallow, lies between them. Opposite Tai-ping-chau is *Saitowhü*, P., on the r. bank; and 2 miles east of Rattler Island are the Sai-tsiu Hills.
58	*Rocky Point*, on the l. bank, opposite to which is *Fuwan*, P.
61·5	*Paknai*, P., on the l. bank, and about a mile above it on the r. bank, *Kumli*, P.
63·75	*Ma-hau* on the l. bank.
65·5	Entrance to **SAMSHUI** Reach (see *Gazetteer*).

Waterways west of the West River

Below *Chau-lin Island* there are a number of creeks used by Chinese shipping for trade with the Sunwui and Sunning districts.

Kongmoon Creek, about 14 miles long, connects the West

River at Edgell Island with the Ngaimoon. **KONGMOON** (see *Gazetteer*) is situated 3 miles from its northern end, and **SUNWUI** (see *Gazetteer*) close to its right bank 2 miles above its southern end. Its general direction is south : in places it is shallow, with a least depth of 5 ft. ; and near Kongmoon it is always congested with native shipping.

The *Ngaimoon* is a deep water entrance about 18 miles long, receiving at its north end the Kongmoon Creek and the Tam-kong or Sunchong River, an important waterway which comes in from the west. On the west side near its mouth is the town of *Samtsuen*, P. ; and further up on the same bank is *Sintong*, P. ; on the east side are *Tzekai*, P., and *Kutsing*, P.

The **Mukchow River** is the name given to the western fork of the West River, where it divides about 6 miles below Ngoihoi. After describing a curve southward for 6 miles it splits up into a miniature delta. On the west side is **Mukchow Creek,** a narrow winding creek about 9 miles long, which runs in a south-westerly direction into the Ngaimoon, passing the town of *Mukchow*, P., on the right bank, about $1\frac{3}{4}$ mile from the eastern entrance. This creek is largely used by junks trading with the Sunning district. The next arm divides after a course of $1\frac{1}{2}$ mile into **Lu-lu Creek,** which runs into the Fotomoon, about 2 miles above the town of *Shatui*, P., and **Holmes Creek,** which runs into the Niwanmoon. A short cross creek connects these two below the village of *Fu-kau*. On the east side is **Moorhen Creek** (see p. 169), which runs south-west into the Motomoon above Chuk-chau Island. It is connected with the Niwanmoon by the **Lo-chau Creek,** which runs south from the same island.

Pearl or Canton River

The **Chu Kiang** or Pearl River is the name given to the part of the Canton River which extends from Canton to the sea. It empties into the Canton River estuary at Chuen-pi Island, about 4 miles below Canton ; and immediately above Canton it is known as the **Paknai River,** which is itself joined by the **Tsungfa River** on the east side, and the **Lupao Creek** on the

west, some 9½ miles above Shameen. The last-mentioned creek connects the Paknai River with the North River ; and the Pearl River below Canton receives on its left bank the waters of the **East River** through the many channels of the East River delta.

The entrance to the Canton River from the Canton River estuary is by the **Chuen-pi Channel,** which leads between Chuen-pi Island and the south-east corner (Bower Point) of Tai-kok-tau Island into the **Bogue** or Boca Tigris Channel. The islands on both sides of the entrance are hilly and heavily fortified. Above Tiger Island the country is flat on both sides, and the numerous islands are of a low-lying alluvial character.

miles (approx.) from Chuen-pi fort.

Chuen-pi fort to First-Bar Island

Right bank. The river is divided by the two small fortified islands of S. and N. Wan-tong, about 3 miles up stream, into two channels, the Boca Tigris on the l. bank, and the **Bremer Channel** on the r. The former is the usual course taken by navigation. The Bremer Channel flows past *Tai-kok-tau Island.*

5 *Tiger Island,* which gives its name to the Boca Tigris, is a small precipitous island to the north of Tai-kok-tau. North-west of it is **Gutzlaff Channel,** which runs between the mainland and two low-lying islands, *Gifu* and *Whitcomb.*

The next group, separated from Whitcomb Island by a channel which leads into the Saiwan Channel (see p. 166), comprises three long narrow islands, of which *Elliot Island* is on the E., and *Wardroper Island,* the largest of the three, on the W., while *Bolton Island* stretches N. from the NW. corner of the latter.

9 *Bedingfield Point* is the southernmost corner of Wardroper Island.

14½ And *Maxwell Point* is the northernmost.

miles (approx.) from Chuen-pi fort.

Elliot Island stretches from mile $9\frac{1}{2}$ to $12\frac{3}{4}$.

Between these islands and the mainland is a channel known as **Hill Passage.**

On the mainland above Bolton Island is the well-known landmark of *Second-Bar Pagoda*, on the most southerly of a small group of hills.

$16\frac{1}{4}$ *Pagoda Bluff*, at the mouth of a small creek, is NE. of the pagoda. About $1\frac{1}{2}$ mile further north is **Nimrod Creek.**

$20\frac{1}{2}$ *First-Bar Island.* Here the river, which has so far run almost N. and S., makes a sweep westward, the main channel being in **Blenheim Reach,** S. of a string of low islands which run W. from First-Bar Island.

Left Bank. The numerous creeks which enter the Canton River on this side between Chuen-pi and First-Bar Island are all connected with the delta system of the East River.

Junk Creek, immediately N. of Chuen-pi fort, runs between *A-nong-hoi Island*, *Chuen-pi*, and the mainland. It is navigable by shallow-draught boats, and about 4 miles up it on the mainland is the market town of *Taiping Tung*, P.

4 **A-nong-hoi Creek,** also navigable for small junks, runs NE. between A-nong-hoi Island and *Senhouse Island*, and then N. past *Bourchier* and *Staunton Islands* into the **Tungkun River.**

6 *Tau-ling Island* stretches for 2 miles along the l. bank, with *Dundas* and Bourchier Islands behind it ; and immediately N. of it is the entrance to the **Saw-shi Channel,** or Tungkun River, which flows through a rich and populous delta country for some 23 miles to **SHEKLUNG** (see *Gazetteer*), where it joins

miles (approx.) from Chuen-pi fort.	
	the East River. It passes the large town of **TUNGKUN** about 10 miles from its mouth (see *Gazetteer*).
9½	*Blake Point* is on the N. side of the extreme of the Tungkun River, and the southernmost entrance of *Parker Island*.
12½	*Amherst Point*, on Parker Island.
13¾	**Second-Bar Creek,** one of the main arms of the East River delta. From here the series of shoals known as Second Bar stretches N. for some 3 miles up and across the river.
	N. of Second-Bar Creek is *Pottinger Island*, some 4 miles long, separated from *Artillery Island* by **Tse-ki Creek.**
18½	**Escape Creek,** the southern entrance to the East River, lies between Artillery Island and *Davis Island* ; and **Junk Passage,** the northern entrance, runs N. of Davis Island and enters the Canton River E. of First-Bar Island.
21	Junk Passage.

First-Bar Island to Shameen

The river is here divided by a string of islands—First Bar and the four *Flat Islands*—which extend about 3 miles in a westerly direction ; and the northern channel leading to Whampoa is between First Bar and the first Flat Island and along **Cambridge Reach.** The southern or main channel to Canton passes along Blenheim Reach into **Collinson Reach.**

Next to the Flat Islands is *Danes Island*, on the N. side of which is **WHAMPOA,** the old port and anchorage of Canton (see *Gazetteer*). Here the river divides into three channels, of which the northernmost and southernmost, the chief approaches to Canton, are described in the *Gazetteer* (see Canton). The distances from First-Bar Island to *Shameen* are 13 miles

by the northern route and 17 by the main or southern route.

The intermediate channel runs from Whampoa by **American Reach** and **Elliot Passage** into **Canton Back Reach.** Between the northern and the intermediate passages are the islands of Whampoa, *Actaeon*, and *Honam*; and between the intermediate and the southern passages are *French*, *Haddington*, and *Barrow* Islands. There are, besides, several small islands in each channel.

The Creeks north of Canton

Above Canton the main river has the name of the Paknai River. The main channel lies due northwards along the east side of *Belcher Island*, which divides the stream about 1½ mile above Shameen.

At mile 7½ from Shameen is a hilly gorge with the town of *Shekmoon*, P., on the right bank; and 2 miles farther up stream is the junction of three rivers—the Tsungfa, which comes in from the north-east, the Paknai, which comes in from the north, and the Lupao Creek, which connects with the North River at Lupao (see Route 42). West of Belcher Island **Encounter Reach** runs for about 2 miles in a westerly direction, and then makes a loop northwards to the main river above Shekmoon. Several minor creeks join Encounter Reach on the west side.

CHAPTER XIII

THE ISLAND OF HAINAN

General Description—Physical Geography—Coasts and Harbours—Climate —Fauna and Flora—Tribal Divisions—Resources, Trade, and Industry —Communications—Transport—Military—Routes.

General Description

Hainan, an island in the Gulf of Tonkin,is the southernmost portion of China. It lies between lat. 18° 9′ and 20° 10′ and long. 111° 2′ and 108° 37′, at a distance of 290 miles south-west from Hong Kong. It is 180 miles long by about 120 broad, and the area is about 16,000 square miles.

The island presents two distinct formations ; the northern portion, taking a line from Sang-hoe (Ch'ang-hua)–Nam-fong–Chan-lan, is low-lying, with a few isolated hills, presenting totally different geological characteristics from the southern half, which is entirely mountainous, giving the impression that the two have at some time been united by a volcanic upheaval.[1] While the fauna and flora of the northern half resemble in every respect those of the Luichow peninsula (the straits separating them are but 14 miles across), the southern part of Hainan is entirely different, exhibiting the most tropical forms of life and vegetation.

The various tribes inhabiting Hainan are described on p. 183; the so-called Hainanese are simply settlers, mainly Hoklos or Fukienese.

[1] The central mass, the original island so to speak, is of a primary formation of granite and blue trachyte. The northern portion is of intrusive volcanic origin. Volcanic formations are observed in several districts, particularly in the north-eastern quarter of the island. The Hummocks are a series of secondary craters, and Chiu-chou hill is also an extinct volcano. Hot springs are met with in several places. Earthquakes have been recorded at long intervals during the last three centuries.

Under the Manchus Hainan was divided for administrative purposes into thirteen districts, three of which were originally termed *chou* (independent department). The civil governor was the Kiung-Yai Taotai, which literally means ' Intendant of the Kiung and Yai departments ' ; and the term Kiung-Yai in official correspondence came to mean the whole island of Hainan. Since the establishment of the Chinese Republic, it has been proposed to give Hainan an independent status ; but so far the plan has not matured.

The **population** is variously estimated at between 1,500,000 and 2,000,000, but any calculation must naturally be only approximate. Perhaps there are half a million Lois. The density of the population probably does not exceed 100 to the square mile.

Physical Geography

Mountains.—The northern part of Hainan is on the whole low-lying, with a few isolated hills some of which are of volcanic type. The southern half is entirely mountainous with roughly parallel ranges running in general east-north-east and west-south-west, linked by a few short transverse ranges in the centre. The great Loi Mother range runs roughly east and west, from the centre of the island towards the west coast. Its highest point is 5,870 ft. and at its eastern end is the Loi Mother mountain with its twin peaks. South of these is the Five-finger system, the most conspicuous feature of the island, rising in one of its peaks to 6,300 ft. ; and south again of this range and slightly east of it are the Seven-finger Mountains. The south and south-west coasts are fringed with mountains rising to 2,000 and 3,000 ft. at their highest points ; and near the south-west corner of the island is Mt. Etna, a prominent landmark, standing 4,970 ft. high.

Rivers.—The **Tingan** River (variously known as the Po-ch'êng, Chin Chiang, Ta Chiang, and Fu-jên Chiang) takes its rise on the northern slopes of the Loi Mother range near Angmau, and drains the whole of north-east Hainan.

It has also a smaller branch which joins it at Tingan from the south, taking its rise in a spur of the same range near Tin-heng. The main stream is navigable at all times to Kimkang (Fa-hi) and usually to Ka-lit ; the affluent is navigable to Tin-ngou. This river varies in width from 300 yds. at Ka-lit to half a mile below Tingan ; the channel, however, is much narrower and more than three feet of water cannot be relied on. Its navigation requires intimate local knowledge. Serious obstruction is caused by the presence every few miles of large water-wheels, up to 40 ft. high, varying according to the height of the banks. To obtain sufficient head of water to work these the river is dammed with wattles and stakes, so as to make a fall of about a foot, which boats are not able to surmount ; this leaves only a small fairway sufficient for one boat to pass at a time.

The banks are rarely less than 20 ft. high and often as much as 40 or even more, but can easily be scaled as they are terraced into narrow fields or beds. The water in the river rises about 6–8 ft. in the rainy season.

The **Kachek** River has two branches, both of which rise in the Five-finger system ; the northern branch is the more important. Chinese boats can reach Tin-fou, which is the market for the south-east Lois. This river forms the ordinary route from the district east of the Seven-finger range to the coast, thus avoiding the dangerous country of the Leng-tui (Lingshui) or Van-chiu Lois.

Above the market of Tin-fou there are rapids which are shot by the Lois in their dug-outs, but are impassable by the larger Chinese boats.

The **Sang-hoe** (Ch'ang-hua) River takes its rise on the southern slopes of the Loi Mother range, makes a semi-circle clockwise and westwards, bursts through the Nga-va-Lia (Gorge) and flows into the sea near Ch'ang-hua about half way up the west coast.

Very little is known of this river, running as it does through the wildest portion of Hainan, but it is believed that in the summer at any rate it is navigable as far as the country of

the Big Knot Lois. It is navigated by the Chinese up to the Nga-va Lia.

In addition to the above, there are several rivers of minor importance that are used by boats up a portion of their length, as for instance the **Potsin** River from the Potsin Lagoon to Tam-ko, the **Limko** River, the **Lung-kuan** River joining the Kachek River at its mouth, the **Lingshui** River (see Route 14), and others. All along the east coast, the towns are situated a mile or two up the rivers as a precaution against pirates.

Coasts and Harbours.—The north coast of the island along Hainan Strait is for the most part sandy and low-lying with a few isolated eminences such as Pingmar and Limko Hills, and the Seven-star promontory near Hainan Head. It contains a few shallow bays exposed to the north-east but with tolerably sheltered inner anchorages for small vessels. The east coast is also low-lying as far as Sifa Point, except for the hill at Tongkon Point which stands 1,220 ft. high. From Tongkon to Sifa Point it is lined with palms and for many miles bordered by lagoons and coral reefs. The south-eastern corner is bold of approach with several bays affording shelter from the north-east monsoon. From Snake Point along the west coast are numerous shallow banks and there are few satisfactory anchorages. The principal harbours are described in the following section and in the circuminsular route (Routes 15–18).

Hoihow.[1] The anchorage for steamers is about 3 miles from the Custom House in about 25 ft. of water. There is a junk anchorage close by with 15 ft. of water. Cargo, passengers, &c., are conveyed from ship to shore by means of Customs' boats, junks, gigs, lighters, and sampans, passing round a spit (the extremity of the Baksha Bank) which is year by year pushing its way farther across the entrance. Once round the corner of the spit the water becomes very shallow, and advantage has to be taken of the tide depth to go to and fro. Draught lighters can only reach the steamers

[1] See also *Gazetteer* for description of Hoihow town.

at certain states of the tide and in rough weather it is impossible to discharge cargo. During typhoons, steamers at anchor are in a very dangerous position. No breakwater exists, and ships have to depend entirely on their anchors, with a sandy bottom in an open roadstead.

Four miles to the west of Hoihow is a lighthouse, and at this point for some distance along the coast the land rises to a height of 40 to 60 ft. ; this being part of a ridge at the eastern edge of which is situated a fort (see p. 189) commanding the foreign and junk anchorages and approach to the town. Along the ridge 13 to 14 ft. of water is found fairly close up to the shore. The beach is everywhere sandy, the bottom is sound, and natives may at any time be seen pushing their boats and wading in the shallow water at the mouth of the Potsin River.

Chan-lan Harbour (approximate lat. 19° 31′ 40″ and long. 110° 49′ 15″) lies on the east coast of the island. In 1912 the inhabitants of the Mencheong (Vun-sio) district, being desirous of direct communication with Singapore and Bangkok, instead of through Hoihow, conceived the idea of opening Chan-lan as a port for steamer traffic. The development of the port was undertaken by a syndicate, but by 1914 little work had been done, except a small amount of reclamation and the partial construction of a bund. Work was then discontinued owing to lack of funds.

The harbour is well adapted, by reason of the depth and breadth of the channel, as an anchorage for vessels of from 800 to 1,200 tons, drawing from 16 to 20 ft. The removal of the bar which leaves only 9 ft. depth at low water should present no difficulty.

In a strong north-east monsoon when the seas are very heavy it would be difficult to make the entrance.

Gaalong Harbour. This bay sheltered the whole of the Russian fleet in 1904. It is insufficiently protected from a gale from the south, but there are in the bay fairly large islands, which would afford some shelter. There is a good depth of water.

Yu-lin-kan Harbour (lat. 18° 12·5′, long. 109° 34·5′). The entrance to Yu-lin-kan Harbour is about a cable wide. Careful steering is necessary owing to a reef which runs out from the east shore, at right angles to the course at its narrowest part. On approaching the entrance two white-washed marks are visible on the further slopes of the inner harbour, which if kept in line till well through the narrows, ensures a safe entrance in a depth of from $4\frac{1}{4}$ to $5\frac{1}{4}$ fathoms. Once through the narrows a sweep to the west finds an anchorage in $4\frac{3}{4}$ fathoms, in a large landlocked harbour, 3 miles long by $\frac{1}{2}$ mile broad, gradually narrowing to the north-east where the river flows in. A certain amount of silt has been brought down by the river, but good anchorage is available for 6 steamers of 1,000 tons.

Samah Bay (lat. 18° 14′, long. 109° 30′) lies to the west of Yu-lin-kan, being separated from it by Cape Solomon. It is open to the south, but affords good anchorage in the north-east monsoon in 5 fathoms. There is plenty of accommodation, the water being of sufficient depth for the largest vessels.

The town of Samah is practically the market of Yu-lin-kan, with which place it is connected by a good road ; it is also a large fishing station and junk base.

The shore is sandy with a fringe of rocks.

Aichow (Ngai-chiu) Bay (lat. 18° 22′, long. 109°). The town of Aichow lies some miles up the river which is only navigable by boats during the rainy season.

The anchorage is well sheltered during the north-east monsoon, affording $3\frac{1}{2}$ fathoms some two miles from the beach. At the entrance to the river is a bar, over which there is 7 ft. of water. Inside the bar is a safe harbour for small craft.

Chappu Bay (lat. 19° 42′, long. 109° 10′) is a large bay with an average depth of 5 fathoms within the reef. At the head of it is Niong-po (Yang-p'u) harbour, very well sheltered. The bar gives a low-water depth of 14–17 ft. The entrance to the Inner Tamchow Bay is 3 cables wide. Tamchow Bay is really a lagoon, five fathoms deep, affording shelter in all

winds. Tamchow, lying on the left bank of the river and some miles inland, is an important trading centre.

Climate.—The climate of Hainan is tropical, with great heat in the summer and pleasant warmth in winter. The most agreeable months are December and January when the temperature is down to 50° in early morning and 57° at midday. From February onwards the temperature gradually rises reaching about 73° in March and 82° in April. May is very hot and June scarcely bearable with temperatures of 95° in day and 82° at night. The summer heat is aggravated by protracted calms in the day time, but there are frequent thunderstorms at night. The calms are broken by squalls and typhoons, the latter occurring from June to October. The north-east monsoon brings rain and cool weather, but frequent fogs; the south-west monsoon brings heat and squalls.

On the whole the warm damp climate of the island is unhealthy. The populous districts are visited by the common diseases of southern China, including epidemics of plague, cholera, and small-pox. Malarial complaints are common. and in the country districts the natives suffer frequently from hook-worm. The frequent rains and mists render the mountain districts peculiarly unhealthy.

Fauna and Flora

Fauna. The fauna of Hainan is entirely distinct from that of South China. It has not been carefully studied, information on the subject being mainly derived from a journey by Mr. Swinhoe. He describes three species of deer, the Sambur, the Cervus Eldi, and the mouse deer. The fauna also includes boar, black bear, large cinnamon bear (rumoured), black gibbon, large mongoose, various types of monkeys, leopard, and possibly the black panther.

Of birds the following are found: snipe, quail, teal, duck, geese, partridge, woodcock, pigeon (three varieties), jungle fowl, Swinhoe's pheasant, green pigeon (two varieties), yellow pigeon.

Numerous snakes are found, including the hamadryad, the coral, the bamboo, the cobra, and pythons.

The fresh-water fish are mostly of the carp and perch type.

Flora. The most distinctive tree in Hainan is the palm, several varieties of which are found : coco-nut, betel-nut, fan palm, sago palm, caryota, and many others. The banyan, tulip, and cotton-wood trees are common. Many fragrant woods, and fine woods (including teak) used for making furniture, are also found. Bamboo abounds, and is used for an infinite variety of purposes. Rattan is found in the southern mountains.

There are few fruit trees in Hainan. The pine apple, custard apple, papaw, jack fruit, quince, and wild fig are found. Tobacco, indigo, sesamum, and galingal are grown in various districts, and the culture of tea, coffee, and rubber has been introduced.

Tribal Divisions

Population

The Lois. The origin of the Loi tribes in Hainan is doubtful. Theories crediting them with Siamese origin have been advanced, since they resemble the Siamese and Western Annamese in appearance and certain customs. Other authorities hold the view that the Lois had their origin in the Malay peninsula, with the exception of the Limko Lois, who resemble more especially the Lao tribes of North Burma.

The Lois were apparently in possession of Hainan in 110 B. C., and most Chinese accept them as being the original inhabitants of the island. They are divided roughly into two broad classes (*a*) ' tame ' and (*b*) ' wild ' according to whether they do or do not acknowledge Chinese authority.

Generally speaking the men are of good physique with rather square features, noses not so flat as the Chinese, and eyes of different type. The women in many cases are tattooed. They are splendid mountaineers, inured to fatigue and privation, and by nature huntsmen they live chiefly by the chase. Their religion is nature worship.

There are three divisions of ' tame ' Lois—the Keng-toa (Kiungchow), Limko, and Tamchow Lois inhabiting the north-west of the island. These intermarry with Chinese and occasionally wear Chinese dress.

There are six tribes of ' wild ' Lois, easily distinguishable by variations of coiffure and dress. They are:

(1) The ' Six Clans ' met with south of Lia-mui (Ling-mên). They are sometimes called ' shaved head ' Lois, as they have adopted the Chinese method of hair-dressing.

(2) The Leng-tui (Lingshui) and Vang-chiu tribe similar to (1).

(3) The Toa-tang ('Big Knot'). These wear no clothes, are unshaved, and tie their hair in a large knot over the forehead. They are very shy and suspicious. They inhabit the district from the sources of the Sang-hoe River to Dang-ka (T'ung-chia).

(4) The Toi-sia'm (' Little Cloth ') tribe. They are found north of Ta-an.

(5) The Ha Lois in the extreme west, probably the wildest of all.

(6) The Tae-hih ('Double apron') are found with the 'Six Clans '.

Other defined divisions of the Loi race may exist, but the above are the most distinct.

The Lois rebel periodically against Chinese government. The rebellions usually follow the same course. An invasion of Chinese territory first takes place which carries all before it, until sufficient troops can be collected to repel it. The invasion is then gradually driven back; the Lois retire to the hills, deserting the villages and driving off all stock. The Chinese then occupy the villages until fever sets in, when a retreat is made. The Lois then reoccupy their villages, and live peacefully until the raiding fever seizes them once more, when history repeats itself.

The Miaos. The Hainan Miaos are in type Mongols, and are similar to those found on the mainland. There is good reason to suppose that they were the original inhabitants of the island, having been subdued by the Lois, who drove them

into the remoter mountain fastnesses. They are quite autonomous and pay no taxes, regarding themselves as the rightful owners of the land. They are a more energetic and manly race than the Lois, with whom they do not intermarry. Scattered throughout the southern districts of Hainan, they number about 50,000. The Miaos sometimes join the Lois in their rebellions, but they are not sufficiently numerous and are too scattered to cause trouble alone.

The Hakkas. Here and there throughout the island, especially in the neighbourhood of Nodoa, Hakka villages are found. East of the Five-finger Mountains there is another settlement known as the eight villages, and also one near Lingshuihsien. The Hakkas number about 50,000 in all, 40,000 being in the Nodoa district. They retain their old language and customs. The 'Old Hakkas' who settled in the Nodoa district about 1760 are patient and industrious agriculturists and of peaceful disposition. The 'new Hakkas', who came to Hainan about 1860, are more turbulent and lawless.

Resources, Trade, and Industry

The natural resources of Hainan are unquestionably great, but they are for the most part quite undeveloped owing to general insecurity, inadequate communications with the interior, and climatic conditions. Probably not more than five per cent. of the total area is under cultivation, and that chiefly near the large towns in the coastal regions, where the crops are exposed to destructive storms. Large areas of better sheltered land in the interior might be profitably cultivated but for the unsettled condition of the Loi peoples.

Similarly the **mineral resources** which are known to exist, and those which may be reasonably expected from the nature of the geological formation, are practically intact. A Chinese company has attempted by unscientific and unsuccessful methods to exploit the tin mines at Niao-ch'iang-ling in the Nodoa district. Rich copper ore is found near Hoi-tou on the west coast; and traces of gold are found in several of the rivers. The great forests of the Loi country are rich in valuable

woods, but are practically unexploited owing to lack of communications and the climatic difficulties.

Hitherto the chief native **cultures** have been rice, maize, sugar cane, ground nuts, and sweet potatoes. The cultivation of cotton, coffee, hemp, and rubber were introduced in 1910, and some attention has been paid to the development of the coconut industry on the east coast. Should an independent government be granted to the island and additional ports, including Kachek, be opened to foreign trade, these cultures might be profitably developed, especially as labour conditions are favourable.

Important **fisheries** exist at various parts of the coast, and there are a number of minor industries practised in the neighbourhood of Hoihow (see *Gazetteer*).

The principal **exports** at present are cattle, pigs, poultry, eggs, gunny and straw bags, betel-nuts, mats, grass-cloth, hides, sugar, dried fruits, seeds, and leather. The principal **imports** are opium, cotton goods, kerosene oil, beans, native cloth, flour, rice, medicines, and matches.

The net value of trade at Kiungchow was £813,937 in 1912 and £999,764 in 1913. The trade of Hainan has been adversely affected by war conditions.

Communications

Roads. There are four varieties of roads in Hainan :

(1) Cart roads.

(2) Bund roads.

(3) Roads over very open country.

(4) Mountain tracks.

(1) There are two important cart roads, namely, from Potsin to Mencheong (Vun-sio), and from Tun-ngai to Kachek (Route B). The track of the wheels is 7½ ft., with ruts up to 2 ft. deep. On the northern plain there are similar roads, but with only a 5½ ft. track.

(2) Bund roads are found in the paddy districts similar to those on the mainland (see p. 114).

(3) In the open country on the circuminsular route

(Routes Q, &c.), and on the routes between Tingan and Kachek (Route B) and Tingan and Lai-chee-do (Route O), are found several parallel footpaths lying close together. They afford a good surface and are the most useful roads for moving troops in Hainan.

(4) Mountain tracks are characteristic of the whole of the central and southern portions of the island. They are very narrow and frequently obstructed by fallen trees.

On the whole it may be said that the roads in Hainan are only suitable for infantry and pack animals.

There is no railway at present in Hainan ; but the concession granted by the Chinese Government to the American Siems-Carey syndicate allows for the building of a line from Hoihow through Kachek to Lokwei.

Telegraphs. At the end of the nineteenth century a telegraphic system was established between Kiungchow and Hoihow, Vun-siang, Ling-mên, Tanchow, Lingshuihsien, and Aichow; but at present the only telegraph line is that from Hoihow to Kiungchow. A cable connects Hainan with the mainland running from Jui-mee Point to Palm Point, but it has been allowed to fall into complete disrepair.

There was also a wireless installation between Hoihow and Süwenyun, a point due north, on the opposite side of the Hainan Straits. The station at Hoihow is just outside and to the east of the city walls. But owing to inefficient working on the main land, it proved of very little use and is now dismantled.

Postal. There are in Hoihow (1910) three postal systems—the British Postal Agency, the French Post Office, the Chinese Post Office.

The Chinese Post Office has branches at the following places : Aichow, Hweitung, Kachek, Kimkang, Kiungchow, Limko, Lingshuihsien, Lokwei, Maiho, Mencheong, Nodoa, Potsin, Samah, Tanchow, Tingan, and Tsingmai.

Transport

Coolies. The principal means of transport here, as everywhere in China, is by *coolie* labour. In the Chinese portion of

the island the coolies are very good, the best being those coming from the mainland who speak both Hainanese and Cantonese. The usual load is 75 *catties* or 100 lb., with which they will cover from 20 to 25 miles a day at 3 miles an hour including stops. The hire is generally fixed at so many *cash* a *catty* for 10 *li* or 1 *po* (3 miles). This works out at from 60 to 100 cents (about 1*s*. 3*d*. to 2*s*. 1*d*.) a day.

Chinese carriers will penetrate the Loi country for small distances, but require higher pay, and will not carry more than 55 catties or a little under 75 lb.

Loi carriers in their own country will carry as much as 70 catties at times, but as a rule about 40 is their load on the mountain main tracks, while for the smaller and steeper paths it must be reduced to 25.

If Chinese carriers are taken into the mountains the load should not exceed 35 catties.

Wheelbarrows are used on the extreme east of the island—Kiungchow, Mencheong (Vun-sio), and Kachek districts. They will carry 120 lb. of compact weight.

Sedan chairs form the usual method of travel for the richer classes.

Buffalo carts are used on the roads; they vary in size, but the general construction is the same. The body of the cart is formed of cross slats, fastened to long shafts, under which are fixed bearings for the axle; the wheels are made solid of three pieces of wood, to which the axle is fixed by means of a hub projecting inside. There is a removable hood. The length of the carrying portion of the cart is about 10 ft. The 'wheeler' buffalo is attached to the shafts by means of a yoke, formed of a curved piece above joined to a straight bar below the neck by twisted bamboo rope. The 'leader' buffalo has a similar yoke.

The larger type of cart takes 1,000 lb.; smaller types take about 800 lb. and 600 lb. respectively.

No iron is used in the construction of these carts.

Boats. The pattern of boat in use in Hainan is uniform through the island. It is roughly 50 ft. long, 6 ft. broad, and

4 ft. 6 in. from the floor to the movable roof. They are as a rule divided by bulkheads reaching half-way to the roof into compartments, the stern one of which forms the galley. They draw 2 ft. 6 in., and would carry forty men in addition to the crew.

They carry one mast and the ordinary junk sail, and could do 6 knots with a favourable wind. They are also tracked, a smaller mast being fixed to which the towing rope is attached. Poles are also used. Another method is that of lashing a pole about 6 ft. long horizontally across the bows, projecting considerably to one side. The boat is steered as close inshore as possible, and two members of the crew walk in the shallow water and shove against this pole. This is a very slow method, and does not give more than a knot and a half at most.

Large numbers of boats are obtainable on the Po-ch'êng River and at Hoihow and Tingan.

On the Kachek, Lung-kuan, and Lingshui rivers the boats are rather smaller, being 35 to 45 ft. long and 4 ft. beam, with no dividing bulkheads. They would hold 25 to 30 men for a short distance, but if sleeping accommodation were needed this number would have to be reduced by half.

No steam launches of any kind run on the Hainan waterways. A launch of 30 or 40 tons, belonging to the Hainan Concession Company, runs from Hoihow to Tanchow.

Military

Infantry.—In 1910 there were five *ying* (each of from 200 to 250 men) of Provincial troops (now called *King-wai Kuan*) in Hainan, one *ying* at each of the following places: Kiungchow, Hoihow, Aichow, Nodoa, Tanchow, They were armed with single-loading Mausers, 1888 pattern.

The whole was under the command of a brigadier-general, with head-quarters in the infantry fort north of Kiungchow. Detachments from Kiungchow of 40 and 100 men were stationed at Ling-mên and Lingshuihsien respectively.

Artillery.—Artillery fort is situated 3,000 yds. south-east

of the British Consulate at Hoihow. It lies half a mile from the seashore, and is 60 ft. above sea-level. The fort contained in 1910 :

2 15 cm. (5·9 in.) Krupp guns dated 1888.

3 24 cm. (9·4 in.) Krupp guns dated 1890.

1 75 mm. (2·95 in.) Krupp old pattern field gun.

There were no searchlights or range-finders in the fort.

The garrison of the fort consisted of about 100 men.

The total strength of the troops in Hainan was estimated in 1910 to be from 1,000 to 1,200 men.

During the revolution of 1911–12 and the rebellion of 1913, a special force of 1 regiment of infantry (3 battalions) was raised for Hainan, and called the *Kiungchow Ching-pei Tui*. It is uncertain in what towns the battalions are stationed.

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ROUTE A

HOIHOW TO TINGAN

Authority: G. W. Pearson's Report.

Distance 22 miles. Direction S. The road runs at a short distance to the W. of the Po-ch'êng River. The more usual way of reaching Tingan is by boat from Bak-siang, the port of Kiungchow and about 2 miles E. of the city; see Route M.

miles (approx.)	
0	Infantry fort, **HOIHOW,** P. T. The road to Kiungchow is roughly metalled and with good surface. In places it is 30 ft. wide, but the surrounding country is a maze of graves and would be difficult to move across. The ground is undulating and rises to 40 or 50 ft. above the sea-level. Just outside Kiungchow are the American Mission buildings and an old examination hall with a very good well.
	An alternative route runs W. of Kiungchow avoiding the city.
3	**Kiungchow,** P. T. (see *Gazetteer*).
	The road now runs S. through cultivated land with rice plantations and numerous hamlets among palm groves.

miles (approx.)	
11½	**Tap-cu-lou** (Shih-tzŭ-lo), market town. The road now enters uncultivated, volcanic country and is too rough for riding. The Hummocks are passed on the right.
13	**No-yo** (Na-yu) village.
16	**Loe-do** (Liang-shan) village.
18½	**Yun-do** (Wên-shan) an old town with ruined walls, reported to have had in the past a population of 5,000 and to be the oldest town in the island.
22	**Tingan,** P., district city (see *Gazetteer*). The *Po-ch'êng River* is crossed at Tingan.

ROUTE B

Tingan to Kachek (40 miles)

Authority: G. W. Pearson's Report.

The road leaves the city by the S. Gate, and for the first two miles leads over fields till a small stream is crossed by either ferry or ford, after which for one mile is a stretch of grassy downs, which ceases after a Pagoda is passed. The country continues open to **Nam-bok** (Nan-pu), five and a half miles out, where a branch cart road leads to Tun-ngai (Ch'uan-yai). Shortly after the Lo-hou River, a tributary of the Tingan River, is spanned by a fine stone bridge. In spite of the existence of this safe means of crossing the villagers, to avoid toll for its maintenance, usually drive their cattle through a dangerous ford risking the loss of cattle by drowning.

At mile 10 **Ka-deng** (Chü-ting) is passed. With a normal population of 1,000, on market days, occurring every fourth day, it attracts an assembly of 10,000. The cultivation is mainly paddy with some coco-nut groves. Leaving Ka-deng, at 21 miles from Tingan is **Ui-diok** (Huang-chu), a little larger than the former, reached after traversing very broken country, with paddy-fields in the valleys, whose sides are

terraced and fertile. The habitations are as usual surrounded by coco-nut trees. This market makes a convenient halt for the first day's march from Tingan. To the E. of Ui-diok is a dry grass plateau, with occasional small paddy-fields. This extends for four miles till the country becomes moister and herds of cattle are seen grazing. These are used both for export and draught purposes, but the present limitations as to the number exported do not encourage breeding, although this stretch of country is most favourable to it. For fifteen miles no markets are met, as the whole region is drained by Kachek. At mile 38 from Tingan is **Tang-lung-po.** Leaving this coco-nut plantations are met with again.

The district between Tingan and Kachek is probably the most thickly populated in Hainan ; estimated at 2–300 per square mile.

The cart road from Ku-ciu (Chiu-chow) to Kachek does not coincide with the above route from Tingan which is used only by coolies. The former is less direct and longer.

Kachek, P. (see *Gazetteer*) is second only to Hoihow as a market. It has a normal population of 2,000, rising every other day when its market is held to even 40,000. It is the centre of the sugar and cattle industries and lies on the river of the same name which rises in the Loi country near the foot of the Five-finger Mountains. Loi products shipped at Tin-fou are brought down here, to be carried overland to Hoihow or shipped by junk via Bakia its port, a great gun-smuggling centre for the Loi districts.

The main street runs SW., with three more parallel, divided at right angles by others. Were it not for frequent piracies it is probable that the direct seaward junk traffic from Kachek would considerably increase. The town is surrounded by paddy-fields, sugar plantations, and coco-nut groves, and even as far north as this some betel-nut trees exist. Cattle markets are held independently of the regular market, every fourth day, and all markets tap a ten-mile radius or more. The inhabitants are described as being truculent.

ROUTE C

KACHEK TO HOIHOW
via MENCHEONG (VUN-SIO) (99 miles)

Authority : G. W. Pearson's Report.

This important route differs considerably in character from Route B. The soil is unfertile being mostly sand. Where hollows afford some shelter from the east wind, paddy is grown in patches. Away from the main road is **Hweitung,** P. (Ui-hung), a walled district city, which is, however, commercially unimportant. The city itself holds perhaps a thousand inhabitants and is in ruins. It is surrounded by paddy-fields. A picturesque pagoda stands a short distance outside the walls.

Leaving Hweitung, the road crosses a stretch of open heath and brush to the shore. Few houses are passed and little cultivation other than a few fields of sweet potatoes, although immense groves of coco-nuts fringe the seashore in an unbroken line for seventy miles, from **Vang-chiu** through **Lokwei** to **Mencheong.** The road here runs along the beach for four miles, till **Yin-dun** (Yin-tun), a small market, 1 mile inland, is passed, on the stream of the same name, the head-quarters of a fleet of small fishing junks. From Kachek to Yin-dun the road is 27 miles all easily traversed. Here it turns due N., crossing grass-covered dunes, uncultivated except for a few sweet potato-fields here and there. From now onwards large plantations of an oil-bearing tree have recently been planted. The oil is secreted in the kernel of the nut ; the process of extraction is by pressure after drying ; 7 per cent. of the weight of the entire nut can be expressed. As the trees need no cultivation and thrive in any soil, it is a common substitute for kerosene.

At mile 37 from Kachek is the market of **Maiho,** P., with perhaps 2,000 inhabitants, rivalling Mencheong in permanent size ; but, being situated in a thinly populated district, it does not attract so many traders on market days as the latter.

The main productions for which it is the distributing centre are silk, fish, and coco-nuts. Emigrants from Hoihow to Singapore and Siam are mainly drawn from this district which, however, contains no Lois. Its inhabitants are notorious for truculence. The town itself lies at the head of the estuary formed by the junction of three minor rivers, and can be reached by fair-sized craft. On the W. is a flourishing suburb. Maiho lies 7 miles from its port, Chan-lan.

At mile 45 is Mencheong, from which a cart track runs to Dong-kiu, a market, 9 miles on. **Mencheong,** P. (Wên-ch'ang, locally Vun-sio), is a walled town with two gates on the l. bank of a small river and about 10 miles from the sea. Its port is **Chan-lan.** The valleys in this district are fertile and cultivated with rice plantations. The road skirts the E. side of Se-toa hill. At mile 57 is the small village of **Doa-lo,** the only habitation before **Tam-ko** (mile 78). Cart track continues to **Potsin,** P., and there is also a river route between the two towns. Potsin is a large fishing village on the r. bank of the river near its mouth. Tam-ko itself consists only of a single street. The oil trees previously described are very abundant in this neighbourhood. From here on, as the Deng-an River is neared, paddy-fields become more frequent, and the country changes until it resembles the neighbourhood of Hoihow. The river is reached at mile 94, at **Ling-kan-tsi** (Ling-shan-shih), where boat is taken for 5 miles down stream to **Bak-siang,** on the opposite bank close to Hoihow.

ROUTES C (1), (2) AND (3) IN EASTERN HAINA

Authorities: C. Madrolle, *Hai-nan, le pays et ses habitants*, Bulletin du Comité de l'Asie Française, Paris, 1909; and Admiralty Chart No. 2062.

Route C (1). Mencheong to Tong-kon Point

miles (approx.)	
0	**Mencheong,** P. (Vun-sio). Road runs E. through rice cultivation and numerous villages hidden in the bush.
8·5	**Dong-kiu** (Tung-chiao-shih), market.
13	**Kia-kam.**
16	**Leng-lan,** W. of which is Mt. Tong-kon (1,230 ft.) and Tong-kon Point, the most easterly point of the island.

Route C (2). Kia-kam to Tam-ko

0	**Kia-kam;** see Route C (1). Direction NNW. over rolling grass country.
14	**Lo-va** (Lung-ma). About 5 miles SW. of this is the village of Bo-tik and the district from which many emigrants go to Siam and Cochin-China. Road now turns due W.
28	**Tam-ko** (San-chiang): see Route C. A cart track runs from here N. to Potsin, P.

Route C (3). Tam-ko to Maiho

0	**Tam-ko;** see Route C (2). Direction SW. for a few miles, then a sharp turn S.
11	**Lo-ngai** (Lo-yen): on the W. side of Wedge Hill (600 ft.); the road now passes through hilly regions with many basaltic rocks.
24	**Ho-lai** (T'u-lai) in the basin of the Maiho River. After this the road descends into rice plains.
35	**Maiho,** P.: see Route C.

ROUTE D

Kachek to Nodoa (90 miles)

Authority: G. W. Pearson's Report

This route is reported to be a bad and rocky track from Kachek to Vun-siang. From this point it is a bare mountain trail, until it descends on the Great Northern plain some 20 miles from Nodoa. The route touches no point of great importance and is but little used. It is passable by infantry but not by cavalry; for ordinary travellers it would be more convenient and expeditious to use the road to Tingan (Route B), thence by road or river to Nodoa via Ka-lit.

ROUTE D (1)

Kachek to Kimkang (Fa-hi) (60 miles)

Authorities: C. Madrolle, *Hai-nan, le pays et ses habitants*, op. cit.; and Admiralty Chart No. 2,062.

miles (approx.)	
0	**Kachek,** P.: see Gazetteer and Route 2. Direction NW.
10	**Leu-hau** (Ling-k'ou). The road runs through hilly country; and here turns sharply W.
28	**Vun-siang** (T'un-ch'ang): see Route O. The road now turns N. to Tin-heng.
40	**Tin-heng** (Hsin-an): see Route O. The road branches off NW.
45	**Fo-boui** (P'o-wei).
50	**Ka-hok** (Chia-t'o): the road now turns N.
60	**Kimkang,** P., or **Fa-hi** (Ta-t'ich): see Route E.

ROUTE E

NAM-FONG TO KIMKANG (FA-HI) (51 miles)

Authority: G. W. Pearson's Report.

Stage I

	miles	
Nam-fong	0	Market and Loi magistracy.
Nodoa	10	Market.
Tin-si	16	Market.
Hi-ci-chin	22	Village.
No-dia (Na-shê)	26	Market (off road)

Stage II

	miles	miles	
Tai-fong (Hsi-fêng)	9	35	Market.
Hoang-sui	21	47	Large village
Ka-lit	22	48	Market.
Kimkang (Fa-hi)	25	51	Market.

The route is a cart track, running over a rolling plain, covered with heath and scrub, with a few low isolated hills and rich paddy-fields in the hollows. It is passable by infantry or cavalry, while artillery could move with difficulty. There is ample water supply and no lack of camping grounds.

Nam-fong is the seat of the magistracy for the Lois of the Toi-sia'm clan, which includes the Ang-mau Lois. It is the market to which the Lois to the N. of the Loi Mother Range bring their goods.

Nodoa, P. (mile 10), the junction of several roads, is an important market and strategic point (see *Gazetteer*). There were in 1908 about 300 soldiers quartered here, and the town is also the seat of an assistant magistrate of the Tamchow district. There is a branch of the American Mission here, with buildings that would house two battalions and camping ground for two more in the compound.

Tin-si (mile 16) is a small market, recently opened. There are many markets of this name.

No-dia (Na-shê or Ho-shê) (mile 26) really lies along another road to the N., branching off from the present route at mile $25\frac{1}{4}$, but it is only half a mile distant across open country.

Tai-fong (mile 35) is a small market of no particular importance. The hill of the same name immediately behind the town is strongly magnetic, so that a compass cannot be used there for survey work.

Ka-lit (mile 48) is the limit of Chinese boat navigation on the Tingan River ; it is only a small market.

Kimkang (Chin-chiang-shih), P. (mile 51), is the most usual point of embarkation for passengers and goods going to Hoihow by the Tingan or Po-ch'êng river. As a market it is of moderate importance.

ROUTE F

Kimkang (Fa-hi) to Kiungchow (42 miles)

Authority : G. W. Pearson's Report.

After the first 15 miles over country similar to that of the last route, this road enters a very bad stretch of lava formation in the neighbourhood of An-zin (An-jên), where the track is rough, but passable by ponies. This portion of the route has a very bad reputation for robberies.

For an alternative see Routes K and K (2).

ROUTE G

Tanchow to Kimkang (Fa-hi) (47 miles)

From Tanchow Madrolle's route goes eastward to Kimkang (Fa-hi) through rolling country. No description is given.

miles (approx.)	
0	**Tanchow,** P. The road runs E. for a few miles and then bends SE.
7·5	**Do-fo.** The road continues SE. and crosses the end of a low range of hills.
15	**Lok-ki** (Lo-chi), market town below the N. side of Tree Hill. The road now bends NE., crosses two streams, and continues in an easterly direction.
24	**Ka-lai** (Chia-lai), or Hou-lang, village.
37	**Dong-bo** (Lang-p'o), village.
47	**Kimkang,** P. (Fa-hi): see Route E.

ROUTE H

Nodoa to Tanchow (25 miles)

The route described by Madrolle continues from Nam-fong to Nodoa (see Route L), and then branches W. and eventually NW. to Tanchow. The country traversed is not described.

miles (approx.)	
0	**Nodoa,** P. Route runs W. across a low range of hills which run N. and S., terminating at the southern end in Dome Hill. On either side of this range a stream is crossed; and beyond the second stream the direction changes to NW. A third stream is crossed 6 miles farther on.
14	**Tai-deg** (Hsi-shêng). Route now continues N.
25	**Tanchow,** P., see Route T.

ROUTE K

Hoihow to Limko (52½ miles)

Authorities: The following routes (K and L) are taken mainly from the descriptions given by B. C. Henry, in *Ling-Nam*, of journeys made by him and published in 1886. He travelled on foot with carriers. The distances given are approximate, and are taken from a route map given by C. Madrolle, *Bulletin de la Société de Géographie*, Série VII, Tome 19, Paris, 1898.

miles (approx.)	
0	**Hoihow,** P.T. See *Gazetteer*. Direction E., past salt-pans, and across a tidal bay by ferry. The road winds through straggling villages hidden by bamboo groves, and across a sandy plain, in which sweet potatoes, pea-nuts, and sugar cane are grown.
2	**Sa-suen,** village.
3	**Shui-ying,** village on left.
6	A gully is crossed and then a rocky volcanic hill strewn with black boulders. The road then descends into a swampy valley with a large lotus pond, across which is a good stone bridge. Next low hills are crossed and the road winds through masses of black, rock-like scoria.
	The villagers here are of Loi extraction.
11·18	Pagoda on left.
	The road passes to the right of the Hummocks (Shuang-fêng-ling), two prominent hills 564 and 705 ft. high, through well-cultivated land, with large fields of sugar cane and pea-nuts.
12·5	**Tsuan-on,** village on right.
13·65	**Lung-shan** (Long-san), a small town beside a stream which is spanned by a stone bridge, is reached at the end of the first day. Oxen are plentiful, and much meat is eaten in the district.
16·45	The road, passing several prosperous villages, reaches an inlet of the sea running up to Tsingmai.

miles (approx.)

Here a boat is taken up the stream, passing a salt marsh on the right with low bluffs behind it.

19·45 Landing at a stone jetty one ascends the bluff by a rough path to the W gate of Tsingmai.

Tsingmai, P. (Ch'êng-mai), is an old district city of oval shape with walls about a mile in circumference. There are three gates, E., W., and S.; the walls are dilapidated, but on the N. they are overgrown with dense thorny shrubs. Not more than half the interior is occupied by houses. A tower on the N. side commands a good view of the surrounding country, which is a dull rolling plain covered with long grass and low shrubs, and little cultivated. The expanse is relieved by the Hummocks to the SE. and the Tongsui-mun hills (470 ft. high) 4 miles distant to the SW. A stream flowing from the Hummocks passes along the S. of the town and is spanned by two bridges. The lower of these is a fine structure just above a fall in the river, and a stone pagoda stands near the end of it.

21·45 Crossing this bridge the route leads SW. over low hills of heavy clay to a place called 'Thunder Station' (? Lei-chan).

25·18 **To-fêng-shih** (To-fung). A small market town with low-roofed solid-looking houses built of black stone. Salt fish and vegetables sold. There is good water here.

Tong-sui-mun hills on left.

26·73 A small stream is crossed on a substantial bridge (Tiouk-long-keou).

27·34 Bridge over small stream.

30 Burnt station, beyond which a bridgeless stream is forded.

The route crosses rolling plains, the highest point not more than 200 ft. high, covered with wild grass

miles (approx.)

and shrubs with occasional clumps of palm. Buffalo-carts are met here.

34·71 **Sên-shan-shih** (Sham-shan, Sim-to-a), a market town in a cluster of villages surrounded by woodlands. It consists of one long street running E. and W., with a cross street running S.

Loi dialect spoken. Numbers of pigs are reared here.

Route leads SW. over rolling country with red clay soil, broken by groves of trees, along an ox-cart road.

38·23 Boundary between Tsingmai and Limko districts marked by stone pillars.

The road is hedged with cactus.

40·71 **Shün-to** (Shan-ts'un), a small town with a dozen inns. At the back of the town is a small lake. Loi dialect spoken. Roads (see Routes K (1) and K (2)) from here lead SW. to Nam-fong and SE. to Kimkang.

The road is now good and runs through cultivated ground in which pea-nuts are grown. Ox-carts used by the natives.

44·75 **Sam-yen** (Saï-geng), a ' wretched little town '.

Route passes through rolling country thickly studded with villages. Cultivation increases towards Ne-pe.

46·92 **Ne-pe** (Ma-kao), town of 1,000 inhabitants. On the NE. a fine rice plain.

Soil is now sandy : the land is low-lying and cultivated for rice. There are numbers of ducks and other birds. The path occasionally submerged.

50·65 Passing through a large monumental gateway and then a smaller one the road crosses a good stone bridge with small pagoda at the end of it and enters the E. gate of Limko.

52·5 **Limko,** P. (Lin-kao), a walled district city of oval shape a little larger than Tsingmai. There are four

miles (approx.)	
	gates which are never shut, and the houses are dilapidated. A gaudy Confucian temple with college attached stands in the centre of the town, and there is an open space under rice cultivation within the W. gate. A swift muddy river flows along the E. and S. sides, and to the W. is Ko-shan-ling or Limko Hill (614 ft. high), with a temple on the highest point towards the sea. There are good water springs near the top of the hill and a pond. There is considerable junk traffic at the port of Limko.

ROUTE K (1)

Shan-ts'un to Nodoa

Authority: This route is taken from the itinerary given by C. Madrolle, op. cit.

General direction S.–SW. Distance approximately 36 miles.

miles (approx.)	
0	**Shan-ts'un,** see Route K, mile 40·71.
	Direction SW., through undulating country with a few trees and huts.
3·1	**Tong-tang,** hamlet.
7·45	**No-vun** (To-wên), a market town of 500 inhabitants on the NW. of which is a hill of 800 ft. The surrounding country is well cultivated, and there are numerous villages along the road, which bends S.
10·58	**Loun-kan,** village.
	The road now passes through a rice plain.
12·42	Hamlet with thirteen tiled houses.
14	Bare plateau.
17·39	A few clusters of huts, after which the country is more wooded.
	The approach to No-dia is between a rice plain and low hills.

miles (approx.)	
21·74	**No-dia,** a market town of some 800 inhabitants. See Route E.
	The road continues SW. past wooded hills, below which a stream is crossed.
26·1	Stream crossed, in a valley.
28·5	Another stream in a valley, a branch of the Limko River.
29	**Kao-lu-tiai,** village.
29·82	Small stone bridge by a wood. Range of heights along the left of the road.
30·2	Village of 28 huts, beyond which is a wood of fine trees.
34·17	Pagoda on left of road.
36·04	**Nodoa,** P., see Route L and *Gazetteer*.

ROUTE K (2)

Shan-ts'un to Kimkang (Fa-hi)

Authority: This short route, taken from Madrolle's Itinerary (op. cit), connects Route K and the Po-ch'êng or Tingan River.

General direction SE. Distance 14½ miles approximately.

miles (approx.)	
0	**Shan-ts'un**: see Route K. Direction E.
1·86	Boundary of Limko and Tsingmai districts.
	The road traverses undulating ground.
4	Village.
6·21	**Sao-tsen-tsoui,** village. The road bends SE., between hills.
8·7	**Tao-tan-tsoui,** village.
	The road now crosses a plateau about 330 ft. high, and descends to the valley of the Po-ch'êng River.
14·6	**Kimkang,** P. (Fa-hi), a market town of some importance and the most usual point of embarkation for passengers and goods going to Hoihow by the Po-ch'êng River.

ROUTE L

LIMKO TO NAM-FONG

Authorities: see Route K.

The country through which this route, a cart road of the usual type, passes is on the whole easy for travelling, and well cultivated and plentifully supplied. The distance is about 61 miles. Cf. Routes E and K (1).

miles (approx.)		
Total	Intermediate	
		General direction S. along the Limko River which is crossed several limes.
	0	**Limko,** P. Route for 4 miles SE. over level plain with rice cultivation ; road submerged in places, on patches of higher ground cattle are grazed.
		Village on the left marked by 25 palms.
	6	**Mai-to,** market town with one long street. Population said to be 2,200. Salt fish and vegetables on sale. Level country now passed with some low bluffs. On every side are villages with fine groves of bamboos, banyans and jack-fruit trees. The river is crossed by a ferry.
11	5	**Ma-ting** (? Mae-dog), market town. Sweet potatoes, vegetables, sucking pigs, salt-beef and salt-fish sold. Meat plentiful. Loi is the prevailing dialect.
		Route through cultivated country.
21	10	**Hou-lang** (Ka-lai), market town with one street. Loi dialect spoken.
		Trade in tobacco, beans, rice, papayas. Meat plentiful.
		Route now among hills with mountains in the distance, a conspicuous landmark being the

miles (approx.) Total	Inter-mediate	
		dome-shaped peak, Sha-mo-ling or Dome Hill, beyond Nam-fong. Rice fields full of wild ducks and other birds border the road. Ox-carts are in use. In places the road is arched over by interlacing trees. From the hills the road descends into a small rice plain which is well cultivated. Fine trees are a feature of this district. Over a ridge on which old Hakka fortifications are visible, and down a gentle slope to Wo-she.
35	14	**Wo-she** or No-she (No-dia, see Routes E and K (1)) is a small town built against a hill, with one broad street and five temples. It lies in well-wooded and picturesque country. To the S. White-stone Ridge is conspicuous. Many of the ' Old Hakkas ' (Lo-Hak) live in this part. Road passes through rolling pasture lands. Horsemen, wheelbarrows, and buffalo carts are met, and the road is comparatively good.
51	16	**Nodoa,** P. (see *Gazetteer*). In the centre of the Hakka country. Road now passes through shrub-covered pasture land and several fair-sized rice plains with villages bordering them. Bananas and pineapples grow in the district.
61	10	**Nam-fong.** On the edge of the Loi country, situated among grassy hills. One street $\frac{1}{4}$ mile long. The population has been estimated at 4,000 but the town is only interesting as a market for Loi goods. It is unhealthy and the water is bad. Four to five miles to the W. is Dome Hill, or Sha-mo-ling (2,640 ft.).

ROUTE M

Through the Central Mountains *via* Ling-mun to Nam-fong

Authorities: Report on the Island of Hainan by acting-consul G. W. Pearson, 1911, including a journey from Hoihow to the Five-finger Mountains; and *Ling-Nam*, Dr. B. C. Henry, 1886.

Mr. Pearson's journey commenced with a ride from **Hoihow** through **Kiungchow** to **Bak-siang** (distance of 5 miles) on the Po-ch'êng River where boat was taken to Tingan. At Bak-siang about 40 boats of the type described on p. 188 were found waiting to carry cargo into the interior. For description of the river see p. 177. The journey is usually made by the cargo boats at night. On this occasion the travelling was done by day and the boat was tied up from the first night at Lia-t'a village. The next place (m. 17½ from Bak-siang) noted was **Ku-ch'u** (Chiu-chou) landing near the town of Ku-ch'u which lies under a volcanic hill (750 ft. high) and has a population of some 3,000. The next place (m. 21) was **Tun-ngai** (Ch'uan-yai) a small market from which carriers start on the route to Kachek (see Route B). Three miles further on is **Tingan** (m. 24). From here to **Lai-chee-do** the route is described in Route O. The party consisted of 3 Europeans, 3 miscellaneous Chinese coolies, 12 Chinese carriers, escort of 2 Chinese soldiers, and 5 ponies. Much of the heavy baggage was left at Lai-chee-do, and the party with ponies and carriers set out to explore the Five-finger Mountains. Following a track in a southerly and then south-westerly direction across several streams and passes, one of the latter being 1,500 ft. high and very abrupt, they reached the rest house of Ta-zun. From here they continued the day's march to Toa-tung-biet, chief of a cluster of 11 or 12 villages. From here by a path over marsh ground and over a pass of 1,000 ft. to Ta-hong, a Loi village of 50 houses. The track here struck the southern fork of the Kachek River and followed it for some distance. The trail, narrow and

difficult, rose gradually up the lower slopes of the Five-finger Mountains. The party camped by a village at the altitude of 3,000 ft. where they were held up by the continuous rain ; and though they eventually reached a point 4,000 ft. up, the weather and the obstinate refusal of the natives to act as guides prevented them from reaching the summits. The distance from Lai-chee-do to their final camp is about 20 miles measured on the map. They returned to Lai-chee-do and made a fresh journey thence to Nam-fong.

Lai-chee-do to Nam-fong (88 miles)

(The distances as measured on the map are very much shorter than those given in the route, but the winding and undulating course of the latter would account for the differences.)

miles (approx.)	
0	**Lai-chee-do.** Direction W. for 5 miles over rolling turf hills. A fertile rice valley was then entered, at the foot of the ' Mountain of 100 falls ', which gradually tapered into a ravine. From here the path was through jungle winding along the lower levels.
15	**Hang-fi** (Hang-hai on the map) a small Loi village. A short distance beyond this place the route enters the valley of the Sang-hoe (Ch'ang-hua) River which runs WSW. and is commanded here by ' Observation Hill '. The Sang-hoe valley runs between the Great Loi Mother Range and the continuation of the ' Anvil ' and Five-finger system. It is known by the Chinese as the great Loi valley, and the capital of the district is Fan-hiang, the residence of the Tung-kua or Loi chief.
30	**Fan-hiang** is on the bank of the head-waters of the Sang-hoe River. From here after crossing the river twice the party reached Mo-tai. The trail now was very difficult, very steep and leading through

miles (approx.)

rough jungle across the Loi Mother Range. In places it was necessary to hack a way for the ponies with axes and knives.

43 **Ta-an** a cluster of four or five villages on the southern side of the range, the largest of which is

44½ **Ja-biag** near the summit of the pass. The top of the ridge (about 3,000 ft. high) is reached by a very difficult track. Here the source of the Po-ch'êng or Tingan River was met and the track followed the river valleys.

54½ **Ga-lang** (Ka-la), village at the foot of Bach-ciah-lea (White-stone Ridge). Path followed the stream bed down a narrow, enclosed valley which opens out eventually into the more fertile and populous valley of Loi-ban (see Route 11 a).

Two miles beyond Loi-ban is the village of Kwai-fa.

59 **Ham-ngau,** village (? Kap-how).

The track through this district follows the (Po-ch'êng) River with occasional cuts across low hills.

The main stream, 100 yds. wide, is forded about 2 miles from

63 **Long-ma** (? Fung-ma of Henry's journey).

67 **Fan-luen,** a village near the end of the valley.

The path from here runs through picturesque country crossing several small streams.

76 **Fan-ta,** village.

81 **Diu-ti-fo.** The path which is narrow and through jungle winds through hills.

The Po-ch'êng River, which is here wide but shallow and only navigable for native dug-outs, is crossed about 3 miles from Nam-fong.

88 **Nam-fong ;** see Route L.

ROUTE M (1)

Authority: Dr. B. C. Henry describes in his book (*Ling-Nam*, 1886) a journey made by him from *Nam-fong* to *Kachek*, in which he evidently traversed much the same route as Mr. Pearson's party but in the opposite direction. He travelled with carriers, and obtained the help of Loi guides from place to place. Local guides, he says, are indispensable, as the track is very obscure, and winds for a great part through deep jungle. He suffered much hardship on the way from jungle grass and leeches. It is not always possible to identify the place names which he gives with those on the map based on Mr. Pearson's journey, but the following are the chief points mentioned by him.

Nam-fong.

Ta-man-teen which is probably Fan-ta.

Fan-lun ; at the end of a long and fairly fertile valley.

Fung-ma, two villages of this name ; probably the Lung-ma of the map.

Kap-how, village of 25 families ; probably the Ham-ngau-sui of the map.

Kwai-fa.

Loi-ban.

Ka-la (Ga-lang) below Pak-shek-ling (Bach-ciah-lea).

Kwai-fung ; the last village before crossing the pass over the Loi Mother Range.

Shui-ying ; on the southern side of the pass.

Ta-han.

From here Dr. Henry proceeded to a place called **Nga-han** on the banks of a river which appears to be the Sang-hoe. This place is probably Fan-hiang.

His intention was to cross the side of the Five-finger Range and pass through the Loi country to Lingshuihsien (see Route P) ; but he was unable to do this and turned NW. up the valley. His route now is not very clear and was apparently along the Sang-hoe valley below the Loi Mother Range to a village called **Via-ban.** From here he follows for

some distance the valley of a stream which he identifies with the upper waters of the Kachek River stopping for the night at **Shui-kwai,** ' at the foot of the Loi Mother Range and the last of the Loi villages '. It seems possible that Shui-kwai may have been Lai-chee-do. See Route M.

From here he made a day's march to **Ling-mên.**

From Ling-mên he proceeded ' 10 miles ' over rolling country to **All-po** (Wu-p'o, or Ah-fo) ; and thence a day's journey (about 8 miles direct on the map) to **Shun-faü** (Hsin-p'o, or Tin-fou). The last stretch was over a plain with palm plantations and then across a wooded ridge. From Tin-fou he made a night journey (about 20 miles) in a boat, 20 ft. long and 3 ft. wide, to **Kachek.**

ROUTE M (2)

Authority : Another journey through the central mountains, made by C. Madrolle, is briefly described in *Hainan, Le pays et ses habitants*, Bulletin du Comité de l'Asie française, Paris, 1909. It is accompanied by a map ; but the place-names do not coincide with those given by Mr. Pearson, though the general direction of the routes of the two expeditions as shown on the respective maps seems to be much the same for a large part of the journey. Details of Madrolle's route are given below. The distances are conjectural, being calculated mainly from Madrolle's map, with allowances for the irregularities of the mountain tracks which were followed.

miles (approx)	
0	**Lai-chee-do.** Direction SW. for a mile or two and then W., by a winding mountain path along the l bank of a stream which is one of the upper waters of the Kachek River.
5	The route continues W. leaving the stream which flows in from the S. with a conspicuous waterfall visible on the l. of the route.
	The track which is narrow and winding gradually

miles (approx.)	
	ascends the watershed of the southern rivers, crossing three passes.
16	**Ta-dia-moui** (Tan-na-mên : see Route P), the first village 'in the basin of the Aichow River.' [1]
	The route here turns S. and crosses a pass about 2,000 ft. high.
22	**Hap-loua** (Ho-tz'ŭ : see Route P) village in the valley below the pass, 'the residence of the chief of the Ang-mao district.'
	The route now ascends the valley in a southerly direction to the hamlet of Tsou-mên-tsai which stands at a height of 2,600 ft., and then continues along the sides of the Five-finger Mountains.
33	**Fan-za** (Fan-ya), village. Tracks leave this point S. and SE. to Samah and Lingshuihsien (see Routes P and R).
	The route now turns W. down the narrow valleys of Nga-lo and Nga-hat, in which are upper streams of the Aichow River.
41	**Nga-hat,** village. The route now bends sharply NE. and then W.
50	**Mo-tsiang.** The route now takes a northerly direction.
53	**Ta-ta-ho.** The route here follows the river (? Sang-hoe) valley.
63	**Nan-foun.** From here the route continues north by the
70	**Dza-sieng** pass over the Loi Mother Range.
	(The name Dza-sieng suggests identity with the Ja-biang in a similar part of Mr. Pearson's route

[1] Madrolle only speaks of the Aichow River and makes no mention of the Sang-hoe, though he undoubtedly crosses the valley of the latter. Probably his route lay along the upper waters of both rivers, and he made no distinction between them. Henry (*Ling-Nam*, p. 464) observed them both as visible at the same time at a point in his journey between Ta-han and Nga-han.

miles (approx.)	
	(Route N); but Madrolle's map and description place the Dza-sieng pass at the foot of Ying-ko-lea (Eng-kok-ngou) Mountain which in Mr. Pearson's map is located same distance along the range to the NE.)
	The path now descends steeply into the fertile valley of **Lo-soai** (? Loiban) and follows along a river which here bends northwards. This river appears to be the upper waters of the Po-ch'êng River; in which case Madrolle's route here tallies closely with Mr. Pearson's in spite of the discrepancy with regard to Ying-ko-lea.
?100	**Fan-ta.**
?112	**Nam-fong.**

ROUTE N

Kiungchow to Ling-mên (Lia-mui)

Authority: Robert Swinhoe, *Narrative of an Exploring Visit to Hainan.* North China Branch, *Royal Asiatic Soc. Journal, N.S.* IV–VII, 1873.

Journey with chairs and coolies. First part by river. From Tun-chang this route coincides with Route O.

miles (approx.)	
0	Left **KIUNGCHOW** by South Gate and took road eastwards for about 1 mile to river. Embarked (probably at Bak-siang) in flat-bottomed boat propelled by poles and sail.
17	Disembarked at **Kew-chow** (Chiú-chou-shih or Ku-chu) Direction now SSW. through a grassy plain. Passed the Pang-kao-t'a pagoda.
20	**Pang-kao-wan,** small halting place. Direction southwards, passing to right of a solitary round-backed hill about 800 ft. (? Ka-deng Hill).
27	**Lung-fa-he,** large market town.
	Road passes through poor, sandy, undulating

miles (approx.)	
	country with little cultivation. River crossed. Road enters valley.
?32	**Po-tsai** (Po-ch'i), halting place with a few houses. These halting places occur about every 5 miles.
	Road now over hills in westerly direction.
43	**Tun-chang** (Vun-siang, T'un-ch'ang-shih), market town in well-wooded country.
	Road crosses river which winds in a westerly direction ; country more closely wooded.
51	**Nam-lu** (Nan-lü-shih), market town with long street and temple, in forest country.
57	**Fung-moo** (Fo-mok) a similar market town.
59	**Pih-tow-teen,** resting place.
	Crossed mountain range where the ground was cleared of jungle ; the path led steeply over W. end of the hills at a height of about 800 ft.
69	**Ling-mên** (Lia-mui) in a raised plain surrounded by grassy hills. It has one wide street about 150 yds. long, with another on the left side running at right angles to it. Market for Loi products.
	Return journey was made as by Route 0 to Tingan and thence by boat.

ROUTE O

Tingan to Lai-chee-do (68 miles)

Authority : G. W. Pearson's Report.

Stage I

	miles	
Ham-Loi (Hsien-li)	4	Large village.
Tin-ngou (Hsin-wu)	9	Market.
Toi-diak-hut (Shan-chu-hsü)	12	Market.
Toa-mui	16	Fa-ki (wayside inn).
Tin-heng (Hsin-hsing or Hsin-an)	20	Market.

Stage II

	miles		
Toa-vae (Shan-ma)	5	25	Village.
Toa-oak	12	32	Fa-ki (wayside inn)
Vun-siang (T'un-ch'ang)	16	36	Market.
Vun-siang New Market (Tin-si)	17	37	Market.
Bae-cioh-khoe	19	39	Market.
Nam-lu	24	44	Market and Magistracy.

Stage III

	miles		
Fo-mok (P'o-mu or Fêng-mu)	6	50	Market.
Lia-mui (Ling-mên)	12	56	Market and Loi Magistracy.
Lai-chee-do (Li-chih-shan)	24	68	Market.

Stage I.—The road leaves **Tingan** by the West Gate, and for the most part is a track about 3 ft. wide through sweet potato-fields, with occasional patches of paddy or sugar cane. It is of good surface, and would stand considerable wear. There are two or three insignificant shallow streams to be forded. At 15 miles the south branch of the Tingan River must be forded. At low seasons the ford is 3 ft. deep; at other times a boat carrying 12 people is used. The banks are 50 ft. high and the descent is steep.

There are many open spaces, suitable for camping grounds, and water is abundant.

A cart track runs from **Tin-ngou** (mile 9) to Fo-mok (mile 60). The former town is the usual place for the embarkation of goods from the Loi country, going down to the Tingan (also called Po-ch'êng) River. The track passes a little to the south of Tin-ngou and **Toa-diak-hut** (mile 12) with diversions into the towns.

The other towns call for no special notice, being mere agricultural markets.

Stage II.—After **Tin-heng** (mile 20) the road runs through a valley, varying in width from 3 to 10 miles, lying roughly

north-west and south-west. This valley is for the most part uncultivated and covered with grass and scrub ; it would be very fertile, but is left fallow for fear of Loi raids. The hills rise from 1,000 to 2,000 ft. above the valley, which is roughly 500 ft. above mean sea level.

The valley is broadest at its south-western end

Vun-siang (mile 36) is a small town with two markets a mile apart, and is unimportant, except that the Kachek–Nodoa road (see Route 4) crosses at this point.

Just before **Bae-cioh-khoe** (White Rock Market) (mile 39) the road runs through a defile between two low conical hills, the whole forming an admirable defensive position.

Nam-lu (mile 44) is the largest Chinese market in this part, and is also the seat of an assistant magistrate of the Tingan district. The tax collector of the Lois of the Six Districts (i. e. round the Five-finger Mountains) also resides here.

The route in this stage consists of several parallel footpaths, and would stand a good deal of wear. As before, a few small streams must be crossed, which in some cases run along the road for a hundred yards or more.

The whole country here could be used for camping, and water is abundant at all seasons.

Stage III.—After **Nam-lu** the country is much more heavily wooded, both with timber trees and betel-nut groves ; the road becomes a single track, only broad enough to allow of the passage of the buffalo tandems used to pull out the timber. The soil is more clayey and would soon cut up.

About 3 miles short of **Lia-mui** or Ling-mên (mile 56) the open heath is once more reached, and the country is more broken ; the route finally crosses the Lia-mui Hill, ascending at a slope of 22 degrees for 1,000 ft., then dropping about 300 ft. to the town.

From Lia-mui to **Lai-chee-do** (mile 68) the country is composed of very sharp and short undulations, grass covered, and studded with plane trees. In the hollows are thick patches of scrub, where ambushes are frequently laid for travellers. It is very sparsely inhabited, forming a neutral zone between the Lois and Chinese.

Fo-mok (mile 50) is an unimportant market. Lia-mui (Ling-mên) is the main market to which both the Lois of the Six Districts and the southern clans of the Little Skirt or Toi-sia'm Lois bring their goods. The Loi Magistrate for the Six Districts lives here and has a detachment of 40 soldiers. This would be the best place at which to get in touch with the Lois. A market is held every fourth day.

Lai-chee-do or Tin-si (New Market) was opened about twenty years ago, and has to a small extent supplanted Lia-mui ; it is in reality a Loi town with a few Chinese houses.

Speaking generally, there would be no difficulty in moving troops without wheeled transport along this route, the only serious obstacles being the southern branch of the Tingan River at 15 miles, and the northern branch of the Kachek River at Sow Bend at 63 miles. Both of these can be forded in the spring, but at other times of the year they are too deep. To cross the former boats could be collected from Tin-ngou, Tingan, and Tun-ngai in any quantity required. To cross the latter boats could be collected lower down the river, but would have to be brought up through the rapids. In either case bridging would be easy as the bottom is firm and the width under 100 yds. Timber is plentiful.

ROUTE P

Lingshuihsien to Ling-mên

Authority : M. Diehr, *Bericht über eine Reise in das Innere der Insel Hainan* : Mitteilungen des Seminars für Orientalische Sprachen, Berlin, 1908, Jahrgang XI.

This journey was made by M. Diehr in February 1906. Starting from **Hoihow** he marched to **No-yang** (Na-yung) on the Tingan River above Kiungchow, proceeded thence by boat to **Tun-ngai** (Ch'uan-yai) at the eastward bend of the river below Tingan, and thence by the road through **Ui-diok** (Huang-chu) and Doa-lo (Ta-lu) to **Kachek** (see Route B). From Kachek he went by boat to **Lung-kuan,** and thence by

the coast road to **Vang-chiu** and **Lingshuihsien** (see Route Q). From Lingshuihsien he made a journey through the Loi country to the Five-finger Mountains and thence to **Ling-mên** and back to **Tingan** and **Hoihow** by Route N. From Lingshuihsien he travelled in a small boat, propelled by sail, towing, and poling up the Lingshui River as far as Choi-tung. It was low-water season and the river was very shallow, not exceeding 2 ft. in depth. From Choi-tung he struck northwards on foot by a track which follows the stream. The country is wild and mountainous, with little cultivation, except in occasional valleys, and few inhabitants. The path was very narrow and rough, and nowhere would it have been possible to ride. The scenery is fine and the hills mostly heavily wooded. The distances are reckoned mainly by time and are only estimates. The last part of the route coincides with the first part of Madrolle's journey (Route M b).

miles (approx.)	
0·00	**Lingshuihsien,** P. (see Route S). By boat up the Lingshui River, a journey of two days, to Choi-tung. For the first 7 miles the river runs through the palm district, after which the banks are covered with scrub and sparse vegetation, and the country is bare until the mountains are entered. Here the hills are heavily wooded and the scenery fine. Three miles below Choi-tung a branch of the river flows in from the W. from Bo-deng (Pao-t'ing), which is 10 miles distant, and at this point the main river bends northwards towards the Five-finger Mountains.
20	**Choi-tung** (Shih-t'ung) is a Loi village. From here the journey was made on foot by a track which follows near the right bank of the river. It was very heavy going, and streams (some of them breast-deep) were constantly waded: the track runs through dense vegetation.
32	**Pi-sui** (Pa-ts'un), a Loi village across the Lingshui border and in the Vang-chiu district. It is a day's

miles (approx.)	
	march from Choi-tung, and lies below the lofty Syit-kiang (Ch'i-kung) or Seven-finger Mountains.
41	**Dong-ka** (T'ung-chia), a stockaded Loi village, was reached after another day's march. It is approached by a grassy plateau. From here the track north runs through wild and beautiful mountain country, clothed with luxuriant vegetation.
53	**Fan-za** (Fan-ya) was reached next day. It is a prosperous village lying in a fertile valley, with cultivated fields and cattle grazing. Here the route joins Route M (2), and apparently follows the same course, along the W. side of the Five-finger Mountains.
62	**Ap-lua** (Ho-tz'u) was reached in a morning's march, and
68	**Tan-a-mui** (Tan-na-mên) in the afternoon. From here the route taken runs E. to Tin-si (Hsin-shih), a market village half Loi and half Chinese, with a few stone houses as well as huts.
84	**Tin-si** (Lai-chee-do), reached in a day's march through bare country : see Route O.
96	**Ling-mên** (Lia-mui), another day's march : see Route O.

THE CIRCUMINSULAR ROUTES

These form a continuous route running completely round the island, hugging the shore in places, and never very far distant from it. It is described in Route C as far as Kachek. From that city it runs south to Lung-kuan, and continues round the shore until within 10 miles of Lingshuihsien, where it takes a short cut inland, through mountainous country, to that district city. From this point it traverses a peninsula to **Yu-lin-kan** through mountainous country. The customs courier to Yu-lin-kan takes this route, and 9–10 days without impedimenta must be allowed from Hoihow. The mouth of

the Yu-lin-kan stream, or rather the lagoon into which it flows, is crossed by ferry. From Yu-lin-kan the road crosses the mountains to Aichow. From here to Kam-yan (Kan-ên) it at first crosses a strip of low plain between the hills and the shore. Kam-yan is situated on a low-lying sandy stretch of barren country, so poor that the rare event of the killing of a pig is advertised in advance by the local official in a proclamation. The same type of country is met until near Tanchow, where prosperity recommences. The plain here is fertile and seamed with cart tracks. The road follows the coast to **Limko,** a large fishing centre, whence the coast track via **Tsingmai** runs past the 'Hummocks' to **Hoihow** (see Route K).

ROUTE Q (circuminsular)

KACHEK TO VANG-CHIU (45 miles)

Authority: G. W. Pearson's Report.

Twelve miles from **Kachek** is **Lung-kuan** on the river of the same name. It is, however, usually reached by boat, descending the Kachek,[1] and ascending the Lung-kuan streams, which both flow into the same lagoon. The country between the two is most fertile, being especially rich in paddy. At mile 14 is **In-dun** (Yin-t'ang), a small market, where the stream on which it lies is crossed by a wooden trestle bridge 50 yds. in length. Here the paddy ceases. The road runs half a mile inland parallel with the sea, the only crops being sweet potatoes. The sand dunes will not even support the bamboo, screw pine and a few banyan trees forming practically the sole vegetation. At mile 19 is the small market of **Kang-dou** (Hêng-shan), but until **No-lak** (Ho-lo) is reached the country remains barren.

[1] The Kachek River flows in a south-easterly direction, and about 5 miles below Kachek on the right bank is the small walled town of *Lokwei*, P. (Lo-hui). The port of *Bakia* is on the left of the river mouth 12½ miles below Kachek. The boat journey down the Kachek River, along the coast and up the Lung-kuan River to Lung-kuan is usually done in a night, arriving at dawn at Lung-kuan.

This is a great indigo centre. No-lak is a large market of seven or eight streets, seemingly prosperous. The population is said to be 3,000. **Ou-deng** (Hou-an) is remarkable for its iron workers. **Vang-chiu** is the usual type of district city, and possesses also some importance as a market. Population said to number 5,000. The soil of the surrounding country is poor, but considerable paddy is grown. The district, however, suffers from floods at certain high tides and during storms. Each of the three last markets lie from 2 to 3 miles inland, but are still centres of the fishing industry, being supplied with fish by the villages on the coast.

ROUTE R (circuminsular)

Vang-chiu to Aichow

Authority: Madrolle's Itinerary, *Bulletin de la Société de Géographie*, Series VII, Tome 19, Paris, 1898; Admiralty Chart, No. 2062.

Distance about 113 miles.

miles (approx.)	
0	**Vang-chiu** (Wan-chou). Direction SSW. through hilly country. Baker Hill (Liu-fêng-shan), 390 ft. high, lies on the l. overlooking the coast, and between it and the road stands a conspicuous pagoda.
2·5	**Doe-mea** (Tsou-ma) village. A range of hills running SE. is crossed.
3·4	Bridge over stream. Rice culture along the route at this point.
4·3	**Tao-ping** village (? Pao-ting-ling of the Chinese maps).
5·59	Bridge over stream. Palm trees on l.
7	**Lok-ki** (Li-ch'i), a town of some 2,000 inhabitants. The road now crosses a plateau and sandy plain.
10	**Van-leng** (Wan-ling), a town of some size with population said to number 3,000.

miles (approx.)	
11·5	**Kao-kae-ling** hamlet. The road is now through a valley.
14·5	**Hai-san** (Hai-t'ien) village on the coast N. of Nanking Island.
	The road now reaches the coast and follows it closely, running up and down hill through thick vegetation. (Mr. Pearson's map and Admiralty Chart locate the route from Vang-chiu to Hai-san considerably farther from the coast and place Hai-san several miles further W.)
18·8	**Yo-boe** (Yang-mei), a hamlet standing back from the coast. The road now runs along the shore. (Diehr locates Yo-boe rather more S.).
21·74	Stream crossed, opposite Middle Island. Hills on r., with pass between them. Palm trees grow in numbers along this part of the coast.
28	**Ngao-neeng** village at the foot of Ta-niu-ling hill (880 ft.).
29·5	**Leo-toui** hamlet opposite Saddle Island.
33	**Wan-sang** (Wan-shan) village.
35	**Han-tan-wan** bay and small stream. On the r. are wooded hills and beyond the bay the road passes inland to Lingshuihsien.
37·3	**Tang-nea** village (? Tung-ao-shih).
	River among palm plantations crossed.
43	**Ngao-li-ting** (Wu-li-t'ing) village.
	Lingshui River crossed.
46	**Lingshuihsien,** P. Residence of district magistrate. A walled town with suburbs and a reputed population of 5,000. Rice, sugar, and sweet potatoes are grown in the district. The town lies 7 miles up the Lingshui River which flows into an oval-shaped lagoon about 7 miles long. The lagoon is encumbered with banks of coral, but can be entered by junks drawing 8 ft. At the W. side of the entrance is

miles (approx.)	
	Chu-chi fort, and there are two large villages on the shores. The outer anchorage is very exposed. For the route from here into the Loi country see Route P.
	The road now runs SSW. for a few miles and then turns sharply W. to follow the coast.
49·7	**Lam-tau** or Im-tcho (Ying-ch'iu-ying) village.
	River crossed; the route runs along the foot of Table Mountain about 2 miles from the coast. It crosses a plateau a few miles further on.
59·65	**Fou-tou** village, behind Black Point.
	River crossed just before Tong-kiu.
62·13	**Tong-kiu** (T'êng-ch'iao-shih), a large village (marked lower down the bay opposite two islands on the Admiralty Chart). Road runs over a plateau.
69·5	**Neeing-ta-to,** military post. The road here turns inland in a westerly direction through a valley at the foot of the Loi Mountain.
73·31	**Toua-ham,** military post. The road bends S. for 2 miles and then turns SW.
77	**Hoa-kiu** village (Hsiao-ch'iao-hsün). Beyond the hills on the l. is Gaalong Bay.
80·77	**Hong-tao-kam** village.
83·25	**Ang-soua-soui** (Hung-sha-ts'un) village over the creek at the head of Yu-lin-kam Bay (see p. 181) which is crossed by a ferry. This creek is navigable for sampans for 7 miles.
	The road now trends westward along the lagoon and across the peninsula of Cape Salomon. Yu-lin village is on the lagoon at the neck of the small peninsula which closes the lagoon on the W. side.
88·2	**Samah,** P. (San-ya-t'ang). The market town of Yu-lin-kam with which it is connected by a good road. It is a large fishing station with a population of about 1,000 inhabitants.
	The road now skirts Samah Bay.

miles (approx.)	
	Three miles from Samah is an old Mohammedan colony in the village of Ton-mei-koi.
92	**Sam-a** (San-ya-shih) village.
	The road keeps near the shore along the sand dunes.
102	**Ma-ling** (Hsia-ma-ling) village, at the back of which are the Pagoda Mountains, the highest point being 2,810 ft.
104·37	Ravine crossed.
105	**Ya-ma-min** village, behind which Mt. Horn (3,160 ft.) rises in the distance.
107	Pagoda on l. of road.
	The road cuts across the base of Great Cape (1,740 ft.), the Chinese Ma-ling, and takes a north-westerly bend towards Aichow.
111·8	**Kam-oui,** on l. bank of the Aichow River (*Pao-yang-shui*), the port of Aichow.
	River crossed.
113·35	**AICHOW,** P. See *Gazetteer*.

ROUTE S (circuminsular)

Aichow to Ch'ang-hua (Sang-hoe)

Authorities: As in Route R; also Swinhoe, North China Branch, *Royal Asiatic Society Journal, N.S.* VII.

Distance about 93 miles. The country traversed is on the whole very poor.

miles (approx.)	
0	Leaving **AICHOW** the road runs in a south-westerly direction along the river and then follows the shore of Aichow Bay on low ground to the village of
6·5	**Li-hang-sang** of the French maps (? Li-t'ang of the

miles (approx.)	
	Chinese). Dunes passed and patches of wild pine-apple.
10·87	**Soun-mei-pou** (Suan-mei-p'u), a village of 300 inhabitants lying at the back of Snake Point. Here the route crosses hilly country passing one hill 1,320 ft. high, with higher peaks farther inland.
	From Snake Point to South West Point it descends and follows the low coast line fronted with sandy hillocks.
16	**Wang-lou** village.
21·74	**Kao-to** (probably the Kao-ling-hsün of the Chinese maps).
	River crossed, leading to the sea at Pao-ping (Pao-p'ing-hsün) about two miles distant.
24·85	**Mo-lao,** a large village.
27	**San-tao,** village.
32	**Houi-liou,** village.
34·50	**Kê-tao-soui,** a village beneath False Hill (400 ft.).
	Here the road passes inland behind South West Point through the village of
37·9	**Fan-lu** (Huang-liu) (Tin-tao-soui of the French maps). At South West Point is the large fishing village of Eng-ko or Ying-khoa (Ying-ko).
39·45	**Pa-la,** a large village between Flat Hill (700 ft.) and the coast.
	Ling-tao village is passed on the l. (? Ling-t'ou-ts'un of the Chinese maps).
40·38	**Tan-soui,** village.
42	**Lo-tien-soui** village ; after which a river is crossed.
43·49	Stream crossed, which flows from Mt. Etna.
47·5	**Ne-ying-tao** village below the mountains among which is Mt. Etna (4,685 ft.) lying W. Immediately N. of the village is South West Hill (690 ft.) (T'ien-ma-shan).
	Streams crossed at miles 52·5 and 55·3.

miles (approx.)	
	The road follows close to the coast over hilly
57·78	country descending into a plain at Lac-ti-soa, a pallisaded village of 300 inhabitants.
60·89	**Pan-keou** (? P'an-ch'iao-hsü), a pallisaded village of 700 inhabitants.
62·75	**Go-li-tin,** a village of 200 inhabitants.
64	**Kam-yan** (Kan-ên), a walled town of some 3,000 inhabitants, on the l. bank of the Kam-yan or Nan-lung river which is now crossed.
	The road now lies through sandy plains, on which droves of horses were seen.
69·57	**Im-san** village a few miles beyond which two rivers are crossed to
70·82	**Tong-tin-song,** village of some 500 inhabitants.
75·17	**Tsap-so** (? Pa-so-tun), a large village.
77	Ravine crossed.
77·6	**Sou-ou-soua,** village of 350 inhabitants, a few miles W. of Pyramid Point.
	Desert land.
	On the l. is Bak-li fort.
80·15	**Bak-li** (Pei-li-shih), a town on the estuary of the Bak-li River which is now crossed, about 2 miles inland. It consists of one long street and behind the town is a low range of pyramidal hills, between which and the sea the road passes. The harbour of Bak-li is at the village of Toun-tao-kong, at the head of the bay.
83	**Toun-tao-kong,** a fishing village.
	River crossed. Sandy plateau on the r.
88·84	**Si-ke,** large village.
	Delta of the Ch'ang-hua or Sang-hoe River is crossed.
93·2	**Ch'ang-hua** or Sang-hoe, a small walled town about 4 miles S. of Bluff Point, lying below Silver Mountain (1,322 ft.).

ROUTE T (circuminsular)

Ch'ang-hua (Sang-hoa) to Limko

Authority: See Route S.

Distance approximately 91½ miles. The country traversed is sandy and poor until the neighbourhood of Tanchow where it becomes more fertile and prosperous.

The road keeps close to the coast line as far as Sin-hing.

miles (approx.)	
0	Leaving **Ch'ang-hua** (Sang-hoe) the route continues northwards toward Bluff Point and passes Silver Mountain (1,322 ft.) on the l. crossing a small
3·7	stream at the foot.
	Thence it follows the coast along a high sandy beach which gradually becomes lower towards Saddle Hills.
6·2	**Tao-doa,** a fishing village with 120 inhabitants. Saddle Hills (1,064 ft.) on the r.
11·2	**Kong-hao,** a large fishing village of 800 inhabitants. Close by on the E. side is Hoi-mi village (100 inhabitants) and hill 670 ft. high. The road runs along sand-dunes to Flat Point.
21·12	**Hoi-tou** (Hai-t'ou), a fishing town with a population of about 2,500, conspicuous for its white houses, on the N. side of an estuary or lagoon. It is the nearest point to some copper mines worked by the Chinese. Water and wood procurable in abundance. Hoi-tou estuary is dry at low water except for a small channel and the harbour can only be entered with local knowledge.
29	Flat Point (200 ft.) is passed on the l. The country is now less deserted and numerous hamlets are seen.
33·5	A stream is crossed.
35	**Ip-yong-soui,** village.

miles (approx.)	
36·35	**Gao-pek-soui,** a fishing village of 300 inhabitants. This appears to be the same as the Toa-ho (T'ang-hsien) of the Admiralty Chart.
	Chappu Bay extends from Flat Point to Pillar Point, the route following its shore which is lined with sand dunes.
41·63	River crossed.
42·87	**San-hoi** or Tin-tao (T'ien-t'ou-shih), a fishing town and market. The route still follows the coast line to the entrance to Tanchow lagoon.
	It crosses a small plateau.
50·33	Large fishing village.
	The road turns eastwards parallel with the shore
51·57	of the lagoon, through a village.
53·43	**Nam-doa,** village of 300 inhabitants.
55·3	**San-eing** or **Sin-hing** (Hsin-ying-ch'ao-shih).
	At the head of Chappu Bay under the N. shore is the well-sheltered harbour of Niong-po (Yang-p'u) with a low-water depth of 15 ft. From this anchorage the Tanchow lagoon is entered by a fairway of 600 yds. with 5 fathoms depth, between two obsolete forts. The lagoon is completely sheltered but is encumbered with sandbanks. A pier was built at the entrance by the Chiao Hsing Mining Co. in 1910.
	The town of Sin-hing is on the S. shore of the lagoon, 7 miles from Niong-po, and has a harbour for small junks. It is a thriving-looking town of some 4,000 inhabitants, with well-built and tiled houses stretching a considerable distance along the shore.
60·89	**Tanchow,** P. (Tan-chou), the district city, lies about 6 miles above the head of the lagoon on the l. bank of the Tanchow River. It is a walled town of some 4,000 inhabitants and an important trading centre. The road from Sin-hing to Tanchow is described by

miles (approx.)	
	Swinhoe [1] as 'a long, sandy, dreary, uninteresting road, often between hedges, but oftener through open fields. Sweet potatoes, sorghum millet, and melons were growing, and a little vetch and dry rice. We passed over two small bridges.' From Tanchow the route continues inland in a north-easterly direction crossing the Tanchow River and passing plantations of sugar. The country is undulating and Kung-chin (Kwang-ts'un) hill (635 ft.) is passed on the SE. side.
69·89	After crossing a stream the village of Yang-keou is reached.
71·55	Another stream is crossed.
72	**Kwang-lin** (Kouang-soui) village and market. The road now approaches
75·5	Hau-sui Bay which it skirts crossing a creek. A white pagoda is passed on the l. close to the shore. Hau-sui village lies a few miles N. of this point at the E. end of the bay, where there is a creek with good shelter for junks and light craft in 2 to 3 fathoms.
77·5	Stream crossed. The route continues inland ENE. through flat country.
85·74	**Mai-to** (see Route L).
91·5	From here the road turns NNE. along the S. and E. sides of Limko Hill.
	Limko, P. (see Route K).

[1] North China Branch, *Royal Asiatic Society's Journal*, N.S. VII, p. 86.

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NOTE

Type.—All places on the Routes are printed in **black type,** the chief towns appearing in **BLACK CAPITALS.** Names of mountains, rivers, lakes, city gates, bridges, locks, temples, &c., are given in *italics.*

Abbreviations.—The following abbreviations have been used : N.=north ; S.=south ; E.=east ; W.=west ; P.= post-office or postal agency ; T.=telegraph office ; RS.= railway station. The letters 'r.' and 'l.' signify 'right' and 'left' with reference to the direction in which the route is described.

EAST KWANGTUNG

ROUTE 1

LANDING-PLACE, SW. OF SUGARLOAF ISLAND, TO KAK-CHIO

LAND ROUTE (7½ miles)

Authorities: Lieut. E. R. M. Kirkpatrick and Lieut. F. W. Thicknesse, June 1912; Admiralty Chart, No. 1962.

General direction, W. The road is little used, communication being chiefly by water. As far as mile 3, the path (a sunken track) is about 1½ ft. broad. After mile 3 it is a rough track among the hills, which at times almost disappears. At Sao-on the route joins the road from Tathowfow to Kak-chio.

Names are given in Hoklo.

miles	
0	*Landing-place* SW. of Sugarloaf Island. The road leads out of the northernmost of the two bays at a slope of 5° on to a rocky ridge 200 ft. high, and thence descends at a slope of 10° to rice fields. It skirts the foot of a high spur on whose lower slopes is camping-ground for one battalion, and turns W. up a valley 300 yds. broad.
1	*Flagstaff on Signal Hill.* After the flagstaff, the road turns W., round the base of the hills, and continues among foot-hills. The road is generally 1½ ft. broad, made of decomposed granite, and sunk 6 to 7 ft. below the level of the fields.
1½	**Ngutow,** P. (O-t'ao), a large village (500 houses). The road continues W. over rice-fields, and shortly passes along a broad embankment between large fish ponds.

miles

2¼ *Two Bridges House.* Northern bridge consists of 6 stone piers connected by concrete slabs 15 ft. long and 1 ft. wide. Width of stream 100 ft., depth 7 ft. Height of bridge above water, 6 ft. Southern bridge, 20 yds. away over same stream, has 5 piers ; other measurements the same as northern bridge. The road now turns SW. along the banks of a small stream.

2¾ Ford. Road crosses sandy bed of stream 200 ft. broad. Stream in June 1912 was 10 ft. broad and 6 in. deep. Road turns W.

3 Bridge : two granite piers connected by concrete slabs. Width of stream, 25 ft. ; width of bridge, 5 ft. Height of bridge above water, 6 ft. ; depth of water, 6 in. Road turns NW. A branch of it runs over a pass 150 ft. high to **Ka-wo-hom,** a small fishing village with granite quarries, on the shore of *Muddy Bay.* The Kak-chio road now degenerates into a rough track among the hills, which is sometimes indistinguishable. It crosses several narrow valleys with streams which can be forded.

4½ Cross roads. The road turns N. up a long, gently sloping valley, and then inclining to the W., passes down a long narrow ravine, culminating in a 25° slope down to the shore of Muddy Bay. It passes among the rocks on the seashore through a swamp to the village of

6 **Sao-on,** a collection of small hamlets in a rice valley, bounded on the E. by Muddy Bay. The road again rises through a narrow defile by a bad and narrow path of disintegrated granite.

6¾ Pass, about 200 ft. high. Upward slope 5°, downward 3°.

7¼ *Customs Mess.* Road 6 ft. broad, paved with asphalte.

7½ **Kak-chio,** opposite **Swatow,** with British Consulate. Road comes out on to sea front.

ROUTE 2

HOPE BAY TO KAK-CHIO

(A) Land Route (9½ miles)

Authorities: Lieut. F. W. Thicknesse and Lieut. E. R. M. Kirkpatrick, June 1912; Admiralty Chart, No. 1962.

General direction, NW. The route between the landing-place at the mouth of the Tathowfow Creek and the village of Tathowfow was not traversed by land. W. of Tathowfow the path varies from 1 to 3 ft. in width, sandy on the level but rocky when lying among the hills. Two passes have to be crossed, about 300 ft. and 200 ft. high, respectively.

Bridges are of masonry from 3 to 6 ft. in width. At mile 7 the road forks, that to the W. leading to Kak-chio via Kotsanghü; that to the N. (the route followed) is somewhat shorter, but steeper.

Names are given in Hoklo.

miles	
0	**Ho-tu,** small fishing village (20 houses), with landing-place at mouth of *Tathowfow Creek*. Camping-ground here in loose sand for two battalions.
	Pagoda and masonry bridge of 3 spans, 20 ft. long and 6 ft. wide.
3	**Tathowfow,** P. (Tat-hao-p'u). Road starts due W., passing a large fishpond on r. Hills to N. with camping-ground on lower slopes.
3½	Bridge. Width of stream. 15 ft. (dry in June, 1912). Width of bridge, 3 ft. Probable rise of stream, 4 ft. 3-span bridge 100 yds. farther on. Width of stream, 45 ft. (dry in June, 1912). Width of bridge, 4½ ft.
4½	**Po-chiu,** small village on W. side of rocky wooded hill. Camp for half a battalion, covering position for landing at Tathowfow.
	Up to this point the road is of loose sand, 2 ft. wide and level. From here to the foot of the pass at mile 7

miles	
	it varies from 3 ft. to 1 ft. in width, and lies along the banks of small streams which it continually crosses. These streams might rise to a depth of 4 ft., but were dry in June, 1912. A better road lies to the S. of Suaⁿ-pu.
5½	**Suaⁿ-pu,** a large village (200 houses), slightly raised above level of rice fields.
7	Pass. The road forks here, W. branch going to Kak-chio via **Kotsanghü.** This is slightly longer, but there is only one pass. Road becomes rocky and narrow. A conspicuous knoll covered with trees, around which the road passes, is the landmark for this pass. Greatest upward slope, 7°. Height of pass about 300 ft. Downward slope, 4° at first, then 10°.
8	**Sao-on.** The route here joins Route 1.
9½	**Kak-chio.**

(B) Water Route (12 miles)

General direction, NW. The creek can be entered from Hope Bay by any vessel drawing up to 6 ft. of water. From Tathowfow to Swatow one large launch runs daily, from which fact it may be assumed that there must always be at least 4 to 5 ft. of water in this portion of the channel.

Half a mile E. of Tathowfow the river is fordable at low water, when there is a depth of from 3 to 4 ft.

The channel is very complicated, and a local pilot would have to be employed.

The shallow part of the creek on either side of the channel is soft mud for the most part, and would render a landing impracticable except at Tathowfow.

miles	
0	**Ho-tu,** landing-place at mouth of creek.
1	**Ku-suaⁿ,** village on r. Creek starts NE. and turns almost immediately NW., with sand on the S. and extensive mud flats on N. bank.

miles	
	Tortoise Hill (322 ft.) on r., rocky and conspicuous, with small temple on it. The channel here is deep, but very narrow owing to rocks on each side.
1¼	House on r., hill on l. A stream comes in from W. Village of **Nam-sua**^{n} ¼ mile N. Creek 3 ft. 4 in. deep at low water.
2	**Tathowfow,** P., a large market village (1,500 houses). On the mud were 50 junks of 80 piculs (about 5 tons) capacity, and 150 junks of 50 piculs capacity (about 3 tons). Jetty, 80 ft. long and 8 ft. broad, used by Swatow launch daily.
3	**Pei-ka,** a large village (200 houses) on l. On the mud were 20 junks of 80 piculs capacity and 30 junks of 50 piculs capacity.
	Sai-fung (50 houses) on r., situated on W. bank of a creek running N. The waterway now consists of a narrow channel running between extensive mud flats. Average height of banks above low water, 7 ft. Average breadth of channel, 50 ft.
7	Small creek runs in from W. on l.
8	Hamlet, consisting of 4 small huts.
9	Creek debouches into Swatow harbour. At low water there are mud banks on either hand about 1 ft. above water level. The channel is not marked out by stakes. The only stakes visible lead over the mud. The channel runs towards Flower Island, and turns gradually E. when 300 yds. short of Flower Island.
9¾	*Flower Island.* This is the shallowest part of the creek, and should be negotiated at high water.
10¼	*West Island.* The channel here turns almost due E., skirting the mud banks.
11¾	**Kotsanghü,** P. (150 houses).
12	**Kak-chio.** Foreign houses at *Ewo Jetty.*

ROUTE 3

LANDING-PLACE, OPPOSITE MA-SU OR DOUBLE ISLAND, TO SWATOW

Land Route (8¼ miles)

Authority : Lieut. E. R. M. Kirkpatrick, June 1912.

General direction, W. This route is occasionally used by foreigners wanting to go to Ma-su when unable to go by sea.

It cannot properly be called a road, as no definite track exists. At the Anglo-Chinese College the Kia-lat road is struck ; up to this point the route follows the small paths used by the villagers in going to and from their work, keeping as close to the seashore as possible so as not to lose direction. It is passable only by infantry in single file.

The country is flat and sandy. Here and there are low sand hills. The remainder of the country is under cultivation.

No land transport. All is done by water.

miles	
0	*Landing-place opposite Ma-su.* The path starts N. among cultivation.
½	Cultivation ceases.
1½	Village.
1¾	Two lagoons, 300 by 100 yds. Road turns E.
4¼	River 20 ft. wide, crossed by pontoon bridge of two sampans, which are at present on mud. Water 1½ ft. deep in June, 1912.
6¼	Village.
6¾	*Anglo-Chinese College,* a large two-storeyed building standing in an enclosure.
7¼	**Kia-lat,** suburb of Swatow. Foreign-built houses along N. side of the road, which is now metalled and 8 ft. broad.
8¼	**SWATOW,** P. T. RS. (Cantonese : Shan-t'au). See *Gazetteer.*

ROUTE 4

CHAOYANGHSIEN TO HWEILAIHSIEN

Land Route (30 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS. Map, No. 423 (1911).

General direction, SSW. This is on the direct route from Chaoyanghsien to Lukfung.

After crossing 4 miles of water the road is straight and level for 10 miles, passing over loose sand and beach. The remainder of the road passes through undulating country and dry rice fields. The general width is 4 ft. except on the beach. Water is somewhat scarce, being chiefly obtained from wells.

The country offers little difficulty to mounted troops. There are, however, high hills at various points off the route. Much cover is afforded to infantry by sugar-cane, which grows to a height of about 5 ft.

Place-names are given in Hoklo, the dialect most generally spoken on the route.

miles	
0	**CHAOYANGHSIEN,** P. (see *Gazetteer*). An official ferry containing some 30 men crosses from here to Bua-hao-tao. Some 30 or 40 boats at Chaoyanghsien. They draw about 1 ft., and are easily pushed over the mud at low tide by 12 men.
4	*Bua-hao-tao*, landing of ferry. At low tide, extensive mud flats passable by infantry and animals.
5¼	**Bua-hao,** village on r.
7	**Sin-sua^{n},** village on small creek. Route turns l.
8½	Road joins beach. A sign-post marks where the road leaves the beach when coming from the other direction. Route turns r. For the next 6 miles the road is along the beach. The sand is generally hard and good walking. The beach at high tide is about 15 ft. broad.



FORTIFIED PASS
Chaoyanghsien district



JUNKMEN MAKING A DAM

miles	
10	**Sing-suaⁿ,** village 1 mile distant on r.
11½	**Ts'an-sim,** village.
14½	**Kieh-kiaⁿ-tao.** ½ mile to l. is another village (about 50 houses).
16½	Road crosses hills by a low pass. Height of hill on r. 700 ft. General direction changes from S. to SW.
20	**K'ê-t'ao,** two villages of about 100 houses total. Camp for 2 brigades. Water scarce.
21	Fortified pass. A wall with gateway is built across from hill to hill ; it is about 20 ft. high, and kept in good repair. Small village at western foot of pass. Direction changes to W.
25	Temple. Camp for 2 battalions, with water.
	Road gradient 1 in 10, crosses spur of hill 1,700 ft. high on l.
26	Hamlet (25 houses).
	½ mile away on l. is a camp for 2 battalions, with water.
30	**HWEILAIHSIEN,** P., a district city with suburbs, and surrounded by rice cultivation. At 1½ mile, S. by E., is a conspicuous pagoda, and in the vicinity camping accommodation and water may be found for 2 brigades. (For description of Hweilaihsien, see *Gazetteer.*)

ROUTE 5

HWEILAIHSIEN TO KWEITAM

Water Route (29 miles)

Authorities : Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October, 1911 ; War Office MS. Map, No. 423 (1911).

General direction, W. by N. As the Hweilaihsien River is unnavigable above Hou-t'ao—3 miles S. of Hweilaihsien—the journey between these two points is done by land.

The Hweilaihsien River is shallow and tidal. The rise and fall of the tide is 2 ft. The Lengkang River below Lengkang is ascended usually at night, as the only boats available run to suit the markets. Above Lengkang the river runs between low hills, with bamboo growing on the banks. Charcoal is burnt in the hills. It is a good water route, but at Hou-t'ao the embarkation of any large body of troops would be slow, since the bank is of mud and likely to become very difficult with heavy wear.

Although the coast routes from Kapchi and places in its vicinity, and the direct road from Hweilaihsien to Lukfung cross at Lengkang, the bridge is none too strong, and a better route when moving parallel to these roads is via Kweitam. Moreover, the road from the coast at Kitchioh, the best landing from the sea, to Kweitam is exceptionally good. The strengthening of the Lengkang bridge would be a somewhat difficult matter, and would require much material not easily obtained. The river is subject to sudden rises after heavy rains.

miles	
0	**HWEILAIHSIEN,** P. Road leaves by East Gate, going SE. Concrete road, 3 ft. wide, through rice cultivation.
1½	Road turns SW.
3	**Hou-t'ao** (Hkl.), head of navigable river. Here are generally some 12 boats. Draught, 1 ft., length, 25 ft., breadth, 7 ft. Bank on l. here is a bund, 4 ft. high, 1½ ft. broad; muddy at low tide. Bank on r. is impracticable. Rise and fall of tide, 2 ft. Breadth of river is 300 yds., with numerous sand-banks at low water. Pagoda on l., 1 mile distant; and camping-ground near it.
5	Pagoda on l. bank, 1½ mile SE.
	Route turns r. up *Lengkang River*. Three islands just inside the mouth. General direction W.
7½	Island.
10	Route turns r. General direction NW.

miles

$11\frac{3}{4}$ Bridge (under construction in 1911). Two masonry spans inshore, and remainder wooden trestle

12 **Lengkang,** P., market town (250 houses). River about 150 ft. broad and 6 ft. deep. It is not tidal at this point. The water is drinkable if boiled. Wooden trestle bridge of 11 spans, 6 ft. broad. Height above water, 18 ft. The bridge is not strong. Current of river is $1\frac{1}{2}$ knots.

For the next 11 miles the river flows fairly straight from WNW.

23 Route turns r. and goes N.

24 Route turns l. River from **Pêng-k'êm** (Hkl.) (8 miles due N.) flows in on r. This tributary is about 150 ft. broad, and shallow. Main river is 250 ft. broad. (The Northern Road, Lukfung–Kweitam–Kityang–Swatow, passes through Pêng-k'êm. See Route **31**. mile **33**·5.)

26 Tributary 100 ft. broad on r. Northern Road crosses it 2 miles N. by bridge. River winds.

$27\frac{1}{2}$ Small tributary, 20 ft. broad.

28 Shallows. From here to Kweitam the river is only 100 ft. broad and 2 ft. deep, with many races. The navigation is very intricate. It is doubtful, however, whether it can be forded. General direction, W. by S.

29 **Kweitam,** P., walled town with large suburb on l (500 houses). Stone bridge, 8 ft. wide, 310 ft. long, two 15-ft. and twenty 12-ft. spans. During 1911 the bridge was 1 ft. under water. Bank on l. is 16 ft. high and level with the bridge ; the opposite bank consists of low shelving shingle. There is a large carrying trade between Hweilaihsien and Kweitam in charcoal and black olives, and boats are available at Kweitam ; some 25 were seen. (For further description of Kweitam see *Gazetteer*.)

ROUTE 6

KWEITAM TO KITCHIOH

Land Route (23 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October, 1911 ; War Office MS. Map, No. 423 (1911).

General direction, SSW. This is the most practicable route for troops landing at Kitchioh to reach Lukfung. They would turn off at ½ mile N. of Namtong W. It also forms a good route from Kweitam to Lukfung, turning off at the same place, though the ordinary road is further N. Both routes possess the following advantages : (1) cart roads exist for the greater part of the journey ; (2) there is little water to be crossed, an important consideration, since bridging material is scarce and far from the line of march ; (3) there are suitable camping-grounds.

The country is mainly open moorland or dry cultivation, with occasional low hills on either side, passable by infantry. It may be termed ' good riding country ', and affords camping-grounds for troops up to the strength of two divisions. Oxen and buffalo are bred and pastured, and driven as far as Hongkong for the market ; sufficient meat could therefore be relied upon to supply two brigades of British troops for at least two days a week. The carts seen on this route are chiefly used for transporting grass, and their tracks lead in many directions. It is therefore at times a difficult matter to find the true cart-road. It is certain, however, that a rough cart-road exists practically all the way from Kweitam to Kitchioh.

miles	
0	**Kweitam,** P. The road runs SW. through the suburbs. Outside the suburbs it is 4 ft. broad, and runs through a fertile rice plain, with several villages.
1¼	Canton–Swatow telegraph touches the road.
2	Village on l.

miles

$2\frac{1}{4}$ 3-span stone bridge over stream, 45 ft. wide. Width of bridge, 3 ft. Water, 2 ft. deep.

Village a few hundred yards away on r. Road leaves plain and passes over low hills.

$4\frac{1}{4}$ Village on l.

$4\frac{3}{4}$ Temple situated on western slope of hills.

Down gradient 1 in 20. Passing through the hills, road is 7 ft. broad, but on leaving hills 1 mile before temple narrows to 2 ft. After temple, road turns generally S., and becomes a broad cart-road, across a rolling plain of sandy soil covered with coarse grass.

$6\frac{3}{4}$ Branch cart-road, 7 ft. track, leads NW. to **Pi-kao.**

$7\frac{1}{4}$ Small village (20 houses) and stream, crossed by stepping-stones.

$9\frac{1}{4}$ *Rest House*, the only building on the plain for some distance.

$11\frac{1}{4}$ Camping-grounds on each side of the road.

$11\frac{3}{4}$ Cart-road, 7 ft. track, crosses from Lukfung and **P'ou-bui** (7 miles away on r.) to **Tang-kang** (8 miles on l.), Lengkang, and Hweilaihsien.

$12\frac{1}{4}$ **Namtong W.,** P. (300 houses), on l. Camping-ground with sufficient space for one division on r. Local supplies, rice, &c., may be obtained in moderate quantities. There is water here.

$17\frac{1}{4}$ Hamlet (4 houses) on r. Cross-road from **P'ou-bui** (see Route 31, mile 59·3), and **Bun-tsü-hien** (6 miles on r.), to **Kapchi** ($10\frac{1}{2}$ miles on l.). Road now turns SW., leaving moorland and passing through dry cultivation Width, 3 ft.

$18\frac{3}{4}$ Double stone bridge of many small arches, 200 ft. long and 4 ft. wide. Width of stream when not dry, 20 ft., with 6 in. of water. The land is apparently subject to floods.

$19\frac{1}{4}$ The cart-road recommences. In dry weather carts with a second bullock could cross the cultivated ground above described, but there is a stream which would

miles	
	have to be bridged. Bridging material is very scarce. It is believed that the cart-road takes a circuitous route to avoid this.
20½	*Rest House.* Cart-road turns S., and route continues SW. along a path 4 ft. wide, towards a conspicuous pagoda on a hill 200 ft. high. Another cart-road proceeds down a valley on the W. to Kitchioh.
22½	Temple and pagoda. Camping-ground for two brigades, with water. Route now descends.
23	**KITCHIOH,** P. (see *Gazetteer*). The town is approached by the cart-road from the E., round the foot of the above hill.

ROUTE 7

KITCHIOH TO LUKFUNG

Land Route (16½ miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS. Map, No. 423 (1911).

General direction, NW. An alternative route from Kitchioh to Lukfung via Namtong W. is described in Route 6.

The road follows the beach for 12 miles, then turns inland and crosses a ferry which would prove an awkward obstacle. It is not, however, covered by any position on the W. From this ferry to Lukfung the road lies in low cultivated country. It varies from 10 ft. of loose sand road to 3 ft. of good road either of paddy bund or road cut out of rocky hillside. The road along the beach from mile 3 to mile 7 is flanked on the land side by hills 600 ft. high. Water throughout this route except at mile 11½ is scarce and brackish.

miles	
0	**KITCHIOH,** P. Route starts N. past a camping-ground on l.

miles	
1	Route crosses cart-road close to seashore, and turns NW.
2	Stone and concrete bridge of 24 spans. Width of bridge, 5 ft. Width of stream, 420 ft. Depth of water, 1 to 4 ft.
2½	Village, with salt pans, ¼ mile to l.
2¾	Road runs over a rocky promontory at a gradient of 1 in 15. Good hard road, 4 ft. wide.
3¼	Small ravine with hard ground, 60 by 30 yds., and small temple. Height above sea, 100 ft.
4	Road descends rapidly to beach, being partly paved. Gradient 1 in 10.
7½	Road enters a fishing village, and leaves the beach. Road is on a bund 2 ft. broad, with good surface.
8¼	5-span stone bridge, 4 ft. wide. Width of stream, 75 ft., depth, 1 ft. Mud bottom, and no ford possible. Salt is evaporated in the vicinity.
9	3-span stone bridge, 3 ft. wide. Width of stream, 40 ft., depth, 1 ft. Muddy bottom and unfordable.
9½	**Kim-sing,** fishing village (150 houses). Here the road meets the beach again.
10	2-span stone bridge, 3 ft. wide. Width of stream, 30 ft. It is a hill torrent, and dry in dry weather.
11½	2-span stone bridge, 3 ft. wide. Width of stream, 20 ft., depth 6 in. to 3 ft. Fordable.
12	Route leaves beach and becomes a 4 ft. paved road. Camping-ground for 2 brigades. Small pass, 100 ft. high, and a small village (50 houses) on l.
12½	Ferry over *Tam Shui*, or Lukfung River. Width of river, 800 yds., with small island in the middle. 7 boats generally available, affording transport for 80 men at one time. Maximum depth, 6 ft., including a 2 ft. rise of tide. After crossing ferry, road turns NW., and for 2 miles crosses very heavy loose sand. Width of road, 10 to 15 ft.

miles	
14½	Road on l. leading to **Wu-k'am.** Route now follows hard 18 in. bund through paddy fields.
16	Wooden trestle bridge on r., 20 ft. high, 7 ft. wide, leading to E. suburb of Lukfung, the business part of the city. Width of river, 200 ft.
16½	**LUKFUNG,** P. (locally called Tang-hai) (see *Gazetteer*). ½ mile W. is a camping-ground for 2 brigades.

ROUTE 8

LUKFUNG TO HOIFUNG

Land Route (21¼ miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS. Map, No. 423 (1911).

General direction, W. This is part of the main road between Swatow and Waichow. The route is fairly direct and generally flat. Its nature varies from a track some 4 ft. wide to 2 ft. paths among dry cultivation. In places the road crosses moorland which offers ample width for moving troops. Infantry would frequently have to move in single file. The quality of the road is very variable, being good in the winter months but very heavy in wet weather. The route is not available as a whole for wheeled traffic. The country to the N. of the road is hilly. The road generally crosses a dry sandy plain, intersected at intervals by low-lying rice country. To the S., the country merges into sandy flats and wet country impassable except by footpaths. The hills are but sparsely wooded, and there is much uncultivated grass-land. The country is well watered, and the rivers are small and easily bridged, but not generally fordable. Troops can camp almost anywhere on the plain-land. An ordinary march would be from 12 to 15 miles. The telegraph from Swatow to Canton lies close to the route. From the road it appears

that a broader route for the first 15 miles from Lukfung might be found at the foot of the Northern Hills. The road continues to Waichow (Route 17), but as it crosses a high pass, the usual route is said to be via Bueleng.

Place-names in Hoklo.

miles	
0	**LUKFUNG,** P. At the SE. corner of the city there is a stone bridge spanning a creek 200 ft. broad. Width of bridge, 7 ft.; length of spans, about 20 ft.; height above water, 18 to 20 ft. There are numerous boats on the creek of a type similar to those on the Lengkang River (see Route 5).
	Leaving the city by the west gate, the road, 3 ft. wide, runs generally NNW. over flat dry cultivation.
½	Wooden trestle bridge, 1½ ft. wide. Width of stream, 100 ft.; depth, 8 to 12 ft.; rate of current, 2 knots. The river is tidal, rise and fall 6 in. to 8 in. A rise of 18 in. would destroy the bridge, which is very weak. Camping-ground on l.
1½	3-span stone bridge, 3 ft. wide. Width of stream, 45 ft.; depth, 3 ft.
2	Swatow–Canton Air Line Telegraph crosses route.
	Ford. Width of river, 80 yds.; depth at low water, 1½ ft.; maximum rise, 4 ft. Hard sandy bottom.
2½	**Sua^{n}-têng,** village. A road branches off NE.
3	5-span stone bridge, 4½ ft. wide. Width of river, 75 ft.; depth, 5 ft. Muddy bottom. Road turns W. and crosses a low spur.
4	Stone dam, 6 ft. wide, across mountain stream. Width of stream, 100 ft. Depth of water on the higher side, 1 ft. in dry weather, increasing to 4 ft. at time of flood. After the dam, road crosses dry cultivation at the foot of hills, rising to 1,400 ft. on r. Width of road, 2 ft.
7	**Wu-tzŭ-h(ê)ng,** hamlet (10 houses).
8	Sandy moor commences. Width of road about 10 ft.; good ground for marching in fours.

miles	
9	3-span stone bridge, 4½ ft. wide, with 15 ft. spans. Width of river, 60 ft. ; big sandy bed, but little water.
10	Moorland ends. Telegraph line crosses route.
10¼	2-span stone bridge, 3 ft. wide. Width of stream, 30 ft. ; depth, 2 to 4 ft. Road 2 ft. broad leads through cultivation.
11¼	Moorland recommences. Camping-ground for 2 brigades, with water.
12¾	2-span stone bridge, 2 ft. wide. Width of stream, 30 ft. ; depth, 2 ft. Road 2 ft. wide passes through ½ mile of dry cultivation on near side of bridge, and now continues through dry cultivation for 6½ miles. Width, 2 to 3 ft.
14	A road branches off on l. to **K'o-t(ê)ng** and **Swabue.** 2-span stone bridge, 2 ft. wide. Width of stream, 20 ft. ; depth, 2 ft.
15¼	Another road on l. to K'o-t(ê)ng and Swabue.
16¼	Telegraph line crosses route.
17¾	A shrine and graves of peculiar shape.
18¼	Ferry. Width of river, 300 ft. ; depth, 4 ft. Regular ferry service with 3 boats. Other similar boats available, making it possible to transport 70 men at one time. Good timber to be obtained here.
19	**Ch'ia-hien** (30 houses). 100 yds. farther is a 2-span stone bridge, 3 ft. wide. Width of stream, 20 ft ; depth, 1 ft.
19¼	Camping-ground for 1 division, with water.
19¾	2-span stone bridge, 3 ft. wide. Width of stream, 30 ft. ; depth, 2 ft.
20¼	A road runs NE. to **Kungping** (Route 32, mile 7·2). The main road turns SW. Telegraph line crosses route.
20¾	Suburbs of Hoifung.
21	Bridge.
21¼	**HOIFUNG,** P. T. (Hkl. : Hai-hong). See *Gazetteer*.



SURF BOATS, EAST KWANGTUNG



JUNK ON TAMSHUI RIVER

ROUTE 9

SWABUE TO HOIFUNG

Land Route (15 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS Map, No. 423 (1911).

General direction, N. This is the most direct route from landing-places in the vicinity of Tai-sami Inlet.

For the first nine miles the road passes through hilly country. The remainder of the journey is flat and passes chiefly through paddy. The road varies from 4 ft. of good gravel road to paddy bunds 1½ ft. wide. It may be called a main road, as it forms a link between the district city of Hoifung and the sea. Between Swabue and Hongkong there is a daily service of launches, between Swabue and Swatow a bi-weekly service. These launches are of 7 ft. draught and accommodate 120 men. They run all the year round in fair weather.

Two ridges and a broad river are crossed. The latter is crossed by ferry, and though the accommodation is bad at the ferry itself, there would be no difficulty in sending a sufficient quantity of boats towed by pinnaces up the river. The country is very sparsely wooded, but there is little bridging to be done. Camping-grounds with sufficient water are situated at convenient distances. Communication with the sea by signal would be easy.

The road is reported impassable in rainy weather owing to floods.

Place-names in Hoklo.

miles	
0	**SWABUE,** P. (see *Gazetteer*). Route leaves by the N. gate, and for about ½ mile follows a loose sand track going NW. along the line of the beach.
½	Road turns N. Camping-ground on l.

miles

¾ **K'am-ê,** walled town (150 houses). Just beyond is a 5-span stone bridge, 2 ft. wide. Width of bed of stream, 75 ft. ; depth, 2 ft. at low water, rising to 5 ft. Stream has hard bottom, dry in dry weather ; might be impassable after heavy rain, but would not remain flooded for long. Route now goes NW.

1¾ Ford. Route turns N.

3 Pass, 300 ft. high. Gradient 1 in 7.

3½ Ford. Width, 100 ft. ; depth, 3 to 4 ft. during the rains, but nearly dry in dry weather.

Here a road goes off on r. to **P'ien-ch'ung,** on the northern shore of *Tai-sami Inlet.*

3¾ **Ship-sam-hiong** (' Thirteen Homesteads '), village on l.

4 Camp for 2 brigades. Water plentiful.

5 2-span stone bridge, 3 ft. wide. Width of stream, 30 ft. ; depth, 2 to 4 ft.

6 2-span stone bridge, 3 ft. wide. Width of stream, 30 ft. ; depth, 2 to 4 ft.

6½ **Ch'uk-wai-hue,** market village (about 60 houses).

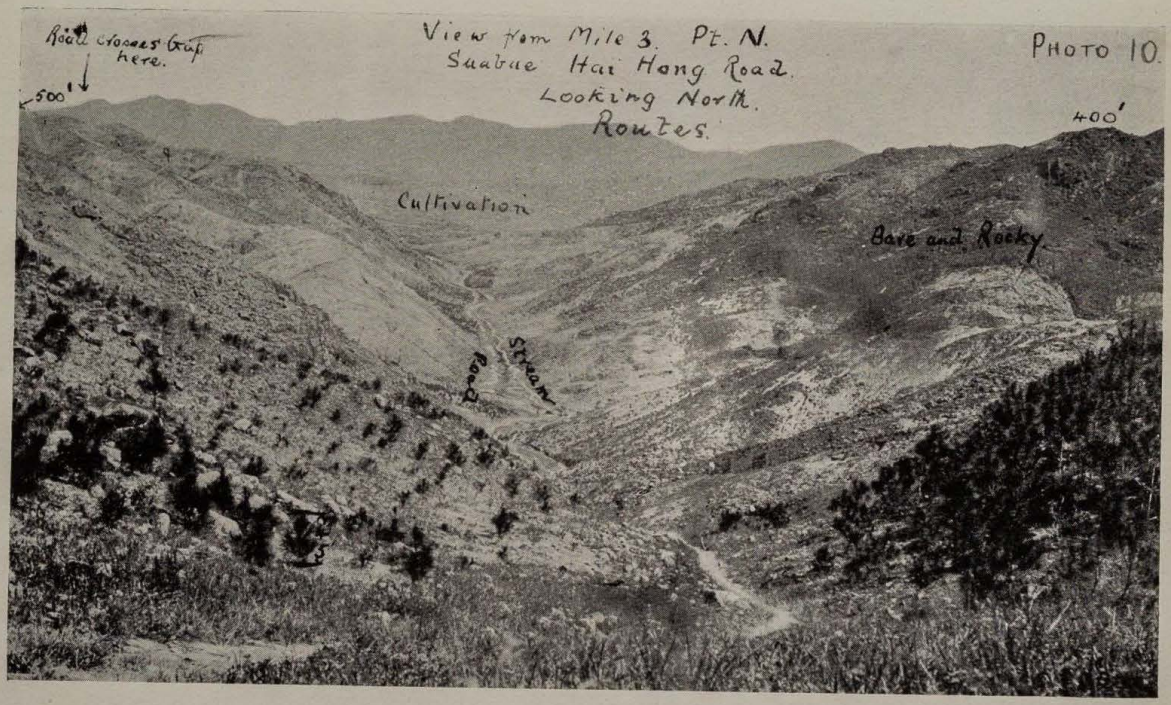
7 Pass 100 ft. high. Good sand road goes off on l. along the hillside to **Hê-t'ao,** about 2 miles distant. Route continues due N. through paddy land.

9 **Sin-ti** (20 houses) on l.

10 **Gao-ch'iu-wui,** small village on l. Here the eastern branch of the *Hoifung River* is met. Route follows the l. bank.

11 Junction with main river, which is crossed by ferry. There is only one boat at the ferry, holding 10 men. Width of river, 150 yds. ; depth, 15 ft. A launch drawing 10 ft. used to run up from the sea. On the W. bank of the river is an old ruined fort. After crossing, the route turns N. along the r. bank.

11½ *I-sua-t'ap,* conspicuous pagoda on a hill 80 ft. high, on l. This serves as a good landmark for many miles. There is camping-ground about a mile NW. of the



PANORAMA, HOIFUNG ROAD

miles

pagoda. It is, however, difficult of access, as for ½ mile beyond the pagoda the road is merely a bund between a marsh and the river, and afterwards passes through paddy cultivation. Where the marsh ends the route leaves the river. From here to Hoifung the road is 3 ft. wide and good.

12½ **P'on-kia** (30 houses).

13½ **Kin-ê** (7 houses).

15 **HOIFUNG,** P. T. The city itself is small, but the suburbs are extensive. On the N. of the city there is a bridge, 7 ft. wide, and 25 ft. above the river. Width of river, 200 ft. ; depth about 10 ft. or over. Many native craft capable of holding 15 men are available. About a mile NE. of the town there is a good camping-ground. (For further description of the city see *Gazetteer*.)

ROUTE 10

MAKUNG TO SWABUE

Land Route (10¼ miles)

Authorities : Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911 ; War Office MS. Map, No. 423 (1911) ; Admiralty Chart, No. 1962.

General direction, E. by S. This furnishes a route from Club Point. The surface is generally good except for the first mile, where the path is muddy and narrow, rendering it difficult for two people to pass, and for one mile before reaching the beach (mile 5¾), where heavy sand is encountered.

The road along the beach is not visible from the low hills inland, being screened from view by sand hills 40 ft. high. The country between the beach and the hills is mostly heavy sand with patches of cactus.

miles

0 **MAKUNG,** P., fishing village (200 houses) in a sheltered bay. 20 Customs soldiers.

miles	
	Road 2 ft. wide runs NE. across rice fields. Surface bad.
¾	Road turns E. along foot of hills, and becomes a hard beaten track 3 ft. wide.
4	Ford, 1 ft. deep, across a stream 30 ft. wide, with maximum rise of 2 ft. A cross-road runs NE. to Hoifung through a conspicuous low pass in the hills.
4¾	**Pao-tia^{n}-yeh,** fishing village (20 houses). Road runs through heavy sand. Width, 5 ft.
5½	Stone bridge, 4½ ft. wide, with 2-ft. spans. Width of stream, 20 ft. ; depth, 6 in.
5¾	Hard beach with a width of 20 ft. Fairly heavy surf in moderate NE. monsoon, which decreases as road nears Swabue.
10	Small masonry fort. Six 4 in. R.M.L. guns.
10¼	**SWABUE,** P. (see *Gazetteer*). Road enters at S. corner of town.

ROUTE 11

HOWMOON TO KIT-LUNG

Land Route (18¾ miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911 ; War Office MS. Map, No. 423 (1911) ; Admiralty Chart, No. 1962.

General direction, W. by N. This is part of a route from Club Point to Nimshan and Waichow. It runs along the shore under hills for 10 miles, and then striking inland crosses a range dividing Hong-hai Bay from Samchau Inlet. A serious obstacle is at Fung-kuan (mile 8½) where an estuary has to be crossed. Small timber is available in the neighbourhood for this purpose. Beyond this point the country generally is hilly to the N. and S., and swampy in the valley. General width of the road is 3 ft. The surface is good, and generally would not be much affected by rains. Streams are liable to

sudden rises in wet weather on account of their being fed from bare hills.

From Kit-lung there is probably a road N. of hills to Nimshan and Waichow. There is also a coolie track leading to Titcheong across Samchau Inlet marsh. It is not practicable for troops. At mile 7 on this road a path leads to Nimshan.

N.B.—The portion of the route between Howmoon and Fung-kuan has not been traversed.

miles	
0	**HOWMOON,** P. (Hkl. : Ao-m(ê)ng), a large fishing village (400 houses). To the NW. is a fort with five obsolete M.L. guns. (See p. 583.) Route curves round to the W., following the line of the seashore as far as mile 8.
½	Road goes off on r. over 300 ft. pass to **Bueleng,** P. (about 6 miles), and Hoifung (about 16 miles distant).
2	Hills come down close to the shore on r.
4	Stream.
8	Mouth of a small river with two channels, separated by a sand bank not covered at high tide. East channel, 300 ft. wide ; west channel at low water, 30 ft. wide and 7 ft. deep. On W. bank of this river there is a hard, 80 ft. broad, leading to the village of Fung-kuan. The mud of the foreshore is very soft, and fishermen use a plank sleigh to traverse it.
8½	**Fung-kuan** (H.), a fishing village (700 houses) close to the bank, surrounded by swamps. Route goes SW.
9½	Stone bridge with two 20-ft. spans. Width of stream, 40 ft. ; depth, 3 ft., but liable to 3 ft. rise. Road runs through salt-pans and paddy, with 3 ft. mean depth. General direction W.
10½	Camping-ground on spurs of northern hills, with good water, on r. Sufficient space for 2 brigades. Village of 50 houses S. of camp.
11	**Siao-muk** (H.) (20 houses), in a wood about 300 yds. square.

miles	
11¼	Narrow pass, 700 ft. high. Up gradient of 1 in 12 to pass, then 1 in 30 up for ¾ mile through hills. General width of road, 2 ft. North of pass on the nearest hill is a mud watch-tower which indicates the position of the pass. The road down has a gradient of 1 in 7, and is about ½ mile long. From here the road ahead can be seen for several miles. On the western side of the pass it is paved.
12¾	Camping-ground for 2 brigades, with water.
13¾	**Wong-pu** (100 houses). Samchau Inlet, ½ mile away on l.
14¾	Camping-ground for 2 brigades, with water (better than the one at mile 12¾). General direction, NW.
17¼	Ford, easy in fairly dry weather. Width of stream, 50 ft. ; depth, 6 in. to 3 ft. in rainy weather.
18¼	Ford. Stream 100 ft. wide and 2 ft. deep in dry weather. 30 yds. up stream banks (4 ft. high) are suitable for bridging river, which is here 70 ft. wide. Road about 3 ft. wide and good.
18¾	**Kit-lung** (H.), large walled market village (250 houses). Small military post of 15 men. Formerly known as P'ing-ching-ssŭ, owing to the magistrate having his head-quarters there. He has now, however, removed to **Fen-lou-kong** (Fan-wo-kong), and the town is now only known as Kit-lung.

ROUTE 12

PINGHAI TO TITCHEONG

Land Route (9 miles)

Authorities : Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911 ; War Office MS. Map, No 423 (1911).

General direction, NNW. This is the route from landing-places in Harlem Bay to Nimshan (11 miles beyond Titcheong)


beach
fort



VIEW OF HOWMOON

and Waichow. The country traversed is mountainous. The road varies in width from 3 ft. hard road to 2 ft. paddy bunds. Woods are few. There is an extensive wood near Titcheong, but the trees are small (6 in.). Water is plentiful, but owing to the mountainous nature of the country camping-grounds are scarce. Communication with the sea by signal is easy.

miles	
0	**PINGHAI,** P. (see *Gazetteer*). Road leaves by N. gate and goes generally NW. through cultivated rice fields at the foot of hills.
1	3-span stone bridge, 3 ft. wide. Width of stream, 45 ft. ; depth, 1½ ft. to 3 ft.
1½	Road branches off to **Chai-t'ung** on l. A branch of the river mentioned at mile 1 flows S. along main road, and Chai-t'ung road crosses it by a 3-span bridge, 50 ft. long and 3 ft. wide. In heavy rains the river would be 3 ft. deep. From here the main road leads up a fertile valley to a low pass. General direction, N. by W.
2	2-span stone bridge, 3 ft. wide. Width of stream, 35 ft. ; depth, 1 to 4 ft.
3	*Kwun-yam Shan* (H. : Kuan-yin Shan). Height of pass, 500 ft. Up gradient, 1 in 5. Hills on either side, 1,000 ft. A cobbled road in steps, 3 ft. broad. After passing a temple situated in the gap, the road drops 300 ft. in about ½ mile, and proceeds through a defile for 1½ mile, after which it gradually drops to the plain level. Width generally 2 to 3 ft. ; good surface.
4½	2-span stone bridge, 3 ft. wide. Width of stream, 30 ft. Water up to 3 ft. in depth during rains, practically dry in winter.
5	4-span stone bridge, 3 ft. wide. Width of stream 60 ft. ; depth, 2 to 5 ft.
5½	Same stream crosses the route again. 5-span stone bridge, 3 ft. wide. Width of stream, 75 ft. ; depth, 1½ ft. to 5 ft.

miles	
9	**Titcheong,** P., market village (150 houses). There is a small military post of 20 men here, as it is the boundary of the Pinghai district. One mile to the NE. is a wood, with 4 in. to 6 in. timber, and a camping-ground for 2 brigades. Just N. of the town a road turns off NE. to Kit-lung. This road crosses the extreme head of *Samchau Inlet* on a narrow bund nearly 3 miles long.

ROUTE 13

PAKSHASUNHÜ TO PINGHAI

Land Route (10 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS. Map, No. 423 (1911); Admiralty Chart, No. 1962.

General direction, E. by N. This route leads from a good landing beach at Pakshasunhü to the best landing in Harlem Bay, i. e. near Pinghai. The route lies only a mile or two from the seashore, is generally straight and practicable for pack animals and infantry. The road varies from 3 ft. of hard surface to 1½ ft. paddy bund. Two low passes are crossed. A ford, which is easily passed in dry weather, might prove a serious obstacle after heavy rains. Water and camping-grounds are good.

miles	
0	**Pakshasunhü,** P. Good open beach. Extensive glass works with conspicuous chimney near shore. Leaving glass works, the road leads NNE. over flat sand wastes.
½	Camping-ground on l. Road turns ENE.
1¼	**Tao-t'ao-k'a,** small market town (60 houses).
1½	Pass 100 ft. high. Road narrow and rocky, 1½ ft. in width.
2	Road winds for 2½ miles between paddy fields.

miles

Average width of road 3 ft. ; surface good, except where valley is crossed and road becomes a paddy bund.

3 A road goes off on l. to Fên-lou-kong (see Route 11, mile 18¾), 15 miles distant. This road leads up a long valley and appears to cross a pass at a distance of 1½ mile from the cross roads.

4 Ford. Width of stream 100 ft. ; depth 1½ ft. in dry weather. Would rise considerably in wet weather. Current 1½ knots. Half a mile to the S. there is good camping-ground for one brigade, and good water near the camp. General direction, ESE.

4½ **Yü-mei-yün** (150 houses). Hereabouts there are several small and unimportant villages. Small supplies of timber up to 9 in. in thickness are to be found in the vicinity.

6 Pass 120 ft. in height. Gradient 1 in 10 up and down. Paved road 3 ft. in width.

6½ Wooden bridge in bad condition ; width 2 ft. Width of stream, 60 ft. ; depth, 2 ft. to 4 ft. in wet weather. General direction, ENE. Hills on l., small alluvial plain on r.

8½ **Shuk-t'eu-tao** (H.) (100 houses). Road turns to r. and crosses a river by a 5-span stone bridge about ¾ mile below the bridge mentioned in Route 12, mile 1. Width of bridge, 3 ft. Width of stream, 70 ft. ; depth, 3 to 6 ft. From here the road, 3 to 4 ft. broad, runs SE. along the foot of low hills on r.

9 Good camping-ground for two brigades.

10 **PINGHAI,** P., a walled city on a lagoon, which can be reached from the sea by boats of 1 ft. draught. There are good shops, and Chinese provisions are plentiful. For further description, see *Gazetteer*.

ROUTE 14

TAI-P'ANG-SHING TO NGOTOW

Land and Water Route ($12\frac{3}{4}$ miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS Map, No. 423 (1911); Admiralty Chart, No. 1962.

General direction, N. by E. The road leads over a high steep pass, and forms part of an important trade route between Tamshuihü and Tai-p'ang-shing. At Pa-kong, (mile $4\frac{3}{4}$) ferry boats are taken to Ngotow. Embarkation is difficult at Pa-kong, as there is a stretch of $\frac{1}{2}$ mile of mud to be crossed before the sea is reached. The bay is very shallow, being only 6 in. to 1 ft. in depth $\frac{1}{4}$ mile out.

The route as far as Pa-kong affords an alternative route from Tai-p'ang-shing to Sha-yü-chung on the shores of Mirs Bay.

miles	
0	**TAI-P'ANG-SHING** (see *Gazetteer*). Road leaves suburb in a NW. direction. 3-ft. path through rice-fields.
1	Road crosses ravine 10 ft. wide and 10 ft. deep. Stream, 1 ft. deep. Width of bridge, 3 ft. Route turns NNE. up a paved 4-ft. road into the hills. Gradient 1 in 5.
2	Pass 1,100 ft. high. At the summit the road turns N. and descends at a gradient of 1 in 7. It is paved and about 4 ft. broad.
$3\frac{1}{4}$	Hut at foot of pass. Paved road turns off E. into the hills to **Tung-chü**. Road to **Pa-kong** continues N. It is a 3-ft. mud path through ricefields.
$3\frac{3}{4}$	Low pass 150 ft. high over foothills of main range.
$4\frac{1}{4}$	Route turns NE. A road runs SE. to Tung-chü on r.
$4\frac{3}{4}$	**Pa-kong** (H.), small market village (100 houses). It is surrounded by high hills on the land side except

miles	
	to the W. where a road runs over a pass 300 ft. high to Sha-yü-chung.
12¾	**Ngotow,** P. (H. : Ou-t'eo). A regular ferry service exists between Pa-kong and Ngotow. Small sailing boats 20 ft. long and 6 ft. broad are used. Time required in moderate breeze, 2 hrs. (See p. 623.)

ROUTE 15

TAI-P'ANG-SHING TO T'IP-FUK

Land Route (6 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. W. Thicknesse, October 1911; War Office MS. Map, No. 423 (1911); Admiralty Chart, No. 1962.

General direction, W. The surface of the road is rough in the hills and swampy through the rice-fields, except where paved. The pass offers excellent positions for a force resisting an advance from Tai-p'ang-shing.

Through T'ip-fuk a road, used by the Chinese Customs as a patrol road, runs along part of the E. shore of Mirs Bay from Nam-oa to Shatowkok. It is a fair though rocky road, 4 ft. wide when crossing the promontories, and 15 ft. wide when running along the beach.

miles	
0	**TAI-P'ANG-SHING.** Road leaves SW. corner of W. suburbs and runs W. across a 2-span stone bridge, 3 ft. wide. Width of stream, 30 ft.; depth, 2 ft.
1	Road passes over low pass indicated by conspicuous stone, and turns SW. Road leading to Pa-kong on r.
1¾	3-span stone bridge, 4½ ft. wide. Width of stream, 45 ft.; depth, 1 ft.
2	**Wong-mou,** market village (100 houses). 3-span stone bridge, 4½ ft. wide. Width of stream, 45 ft.; depth, 1 ft. Route turns r. General direction, NW. Paved road, 4 ft. wide, for ½ mile.

miles	
2½	3-span stone bridge, 4½ ft. wide. Width of stream, 45 ft. ; depth, 1 ft. Road from this point is a 2 ft. wide mud path.
4	Two good camping-grounds, each for 2 brigades, on r. They are situated on low hills with stream at foot. A narrow pass, gradient 1 in 20, commences here.
5	Village marking end of pass. Height of pass, 160 ft. ; road, 2 ft. wide, rock and mud. Down gradient 1 in 12. High hills rise on either side. Road runs through a wet rice valley to T'ip-fuk.
6	**T'ip-fuk,** fishing village (20 houses) with a Customs station under the charge of a resident European.

ROUTE 16

HOIFUNG TO SAMTOHÜ

Land Route (32¼ miles)

Authorities : Major R. S. Paul and Lieut. F. W. Thicknesse, September 1912 ; War Office MS. Maps, Nos. 434 (1913) ; 377 (1909).

General direction, W. by N. This is the usual road. A shorter road runs via Tsak-shak and Ship-tsz-lou (where it joins the present route at mile 28½), but is not in general use.

The route is mostly level except for the mountain pass at mile 9½. It is partly paved and is classed by natives as a main road. It varies from a road 4 ft. wide, paved with slabs or cobbles, to a mud path 2 ft. wide. It is passable for animals and for infantry in single file. Considerable quantities of fish and charcoal are carried over this road.

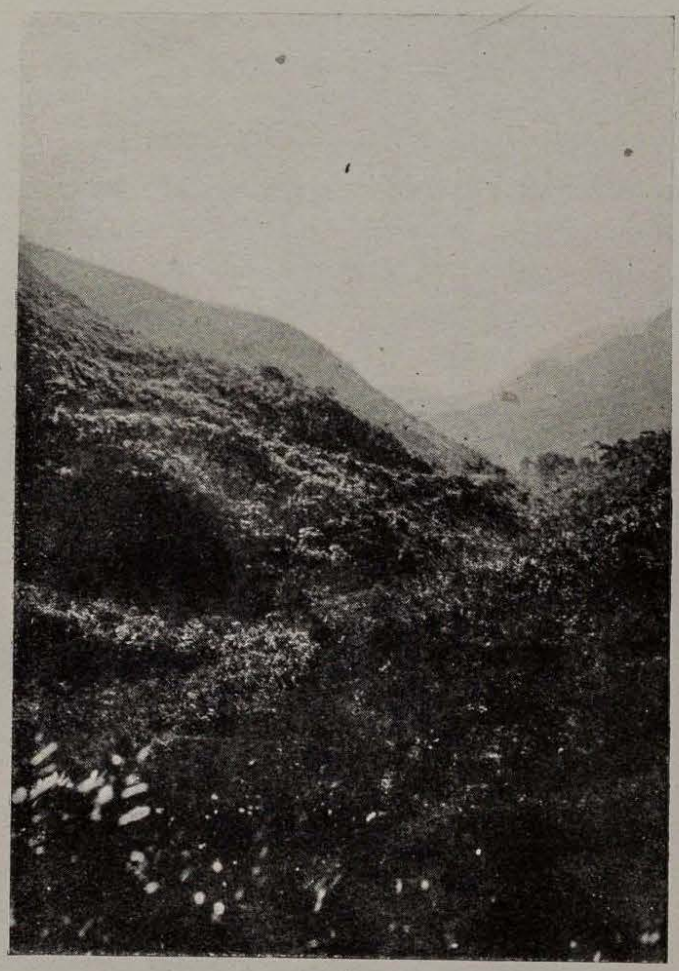
The route for the first mile passes over a sandy plain. It then turns and twists among the foothills of Noi^{n}-hue-sua^{n}, round the eastern spur. At mile 6 it turns NW. and ascends the pass between Noi^{n}-hue-sua^{n} and Ng-chi-shim-sua^{n}. After

descending to the plain again the road turns to the W., and runs over low spurs of the mountain range to the S. The country is well-wooded in the latter part, thickly populated and highly cultivated. Creeks are frequent, but are either adequately bridged or easily fordable. There are not many villages; each family lives in a substantial farmhouse close to its own land. The country is passable for mounted troops in the dry season. There are not many good camping-grounds, but troops could generally camp on the low hills along the road.

Note.—In estimating the total distance, 25 per cent. should be added to the distances given in the route to allow for necessary deviations when moving troops along the road. In this way, the total distance would work out at 40 miles or thereabouts, while the alternative route via Tsak-shak would be about 35 miles.

miles	
0	**HOIFUNG,** P. T. (see *Gazetteer*). The road leaves by the N. gate and runs over a sandy plain and low col.
1	Road from **Ngao-sai-a** (Hkl.) on r. Route turns l. and crosses some rice cultivation. Road 4 to 5 ft. wide and paved in places.
1½	River flowing E. on r. Width, 70 yds.; depth, 2 ft.; gravel bottom. Road now a mud path 1 ft. wide.
2	*Sin-liao-k'iao* (Hkl.), bridge of 4 stone piers, span 20 ft. Approaches concrete; span from approach to nearest pier either end, 30 ft. Piers consist of two upright slabs of granite supporting stone roadway 5 ft. wide. Height of roadway above water, 15 ft. Ford just above bridge, water 2 ft. deep, stony bottom. Right bank slightly higher than left. Road crosses river by bridge and runs across sandy plain.
2½	Suitable camping-ground for 2 brigades on r. General direction, NW.

miles	
3½	Small culvert over a nullah. Road now runs along river.
4	Spurs come down from the hills in front to the river on both sides and form a defile 40 yds. broad and 200 yds. long.
	Ngun-pang-sua^{n} (Hkl.) (3,500 ft.) on l.
	Joss-house on r. Road now leaves the river and runs through the low foothills of the main range, rounding the eastern spur of *Noi*^{n}*-hue-sua*^{n} (Hkl.) which rises to 4,300 ft. on l. General direction, N.
6	Small culvert. Road now turns to l. up a valley.
6¾	Road begins to rise. Easy slope.
7	Road drops towards a mountain torrent on r. and continues 50 ft. above it. Torrent 20 yds. wide running over boulders. Road now 4 ft. wide and paved.
7½	Valley and waterfall on r.
7¾	Stone bridge with 15-ft. span. Width of roadway 4 ft.; height above water 10 ft. Road crosses stream and ascends a stone staircase, gradient 1 in 7. General direction, NW.
9½	Summit of pass, called *Pun-shui-ao* (Hkl.).
	Ng-chi-shim-sua^{n} (4,100 ft.) on r.
10½	Bridge: two piers 15 ft. apart, connected by a slab of granite and a slab of wood. Piers built for a 4-ft. roadway and in indifferent repair. Height above stream 20 ft. There is an alternative road to r. to avoid the broken bridge further on.
10¾	Broken bridge, of same type as previous one. Ford 30 yds. wide, 1 ft. deep, pebbly bottom.
11	Camping-ground on r., suitable for one brigade. Road to **Teng-liao** (H.) on l.
12½	Road turns r.
12⅝	Masonry bridge with 2 piers of 15 ft. span. Roadway 6 ft. wide. Height above water 15 ft.
12¾	Road turns l.



PUN-SHUI-AO PASS

miles

13½ Road turns l., crossing a spur blocking the exit to the defile, and descends at 1 in 7 to the plain, leaving the river.

14¾ Road joins river, a tributary of the East River, flowing W. Shallow stream 30 yds. wide with banks 10 ft. high.

15½ **Po-sim** (H.), large market village, 200 shops. Road leaves river and crosses rice cultivation ; width from now on varies, sometimes a mud path 2 ft. wide, sometimes cobbled or slabs 4 ft. in width.

16½ **Koi-ts'un** (H.) (50 houses) on r.

17¾ Bridges over creeks. Each bridge consists of 2 piers of boulders and mortar. Width of roadway 4 ft., height above stream 8 ft. Length of bridge 45 ft. River fordable anywhere.

19 **Wong-sha-t'ao** (H.) (30 houses) among trees.

20½ Bridge with 4 masonry piers ; roadway 4 ft. wide, 8 ft. above water ; length of bridge 20 yds. Torrent fordable anywhere.

21½ **Tong-kok** (H.), small hamlet.

22 Ford. Creek 50 yds. wide, depth 1 ft.

22½ **Shin-am** (H.), market village (200 houses).

22¾ Path on r. to **Pak-liao-kong** (H.).

23 Path on r. to **Tsim-kok-lung** (H.).

23½ **Liu-mong** (H.) (30 houses). Road runs down a valley ½ mile broad.

24½ Defile ½ mile long. Foothills 300 ft. high on either side.

25 **Wan-yao** (H.) (7 houses). Road now meets another branch of the river on l., and follows its course for a short distance.

25½ **Ha-pi** (H.) (60 houses).

25¾ Ford across river, 30 yds. broad, 1 ft. deep.

26¼ **Sung-kim** (H.), large market village (600 houses).

26¾ Ford 30 yds. broad, 1 ft. deep, across another stream coming from the hills on the l. The road then

miles	
	runs over open downs suitable for camping, where 2 brigades could be accommodated with ease.
28	Broken bridge. Stream has to be forded, 30 yds. broad, 1 ft. deep, low banks.
28½	*Ship-tsz-lou* (H.) (cross-roads). Road from **Wingon,** P. (50 miles) on N.; from **Tsak-shak** (H.) and **Hoifung** (32 miles) on S. The latter is the alternative route already mentioned.
28¾	Ford 30 yds. broad, depth 1 ft. Road runs over open downs suitable for a camp. Plenty of room for 2 brigades.
29¼	Bridge, 4 ft. wide, 20 ft. long, height above water 4 ft. Depth of water 3 ft.
30	Ford 30 yds. broad, depth 1 ft.
31¼	Road from Tsak-shak (15 miles) and Hoifung on S.
31½	Road from **Yen-tun** (H.) on N.
32¼	**SAMTOHÜ,** P. (H.: Sam-tou-chuk) on l. bank of river (see *Gazetteer*).

ROUTE 17

SAMTOHÜ TO WAICHOW

Water Route (63¾ miles)

Authorities: Major R. S. Paul and Lieut. F. W. Thicknesse, September 1912; War Office MS. Maps, Nos. 434 (1913); 377 (1909).

General direction, W. This is a direct water route and the usual method of reaching Waichow. Regular passenger junks run from Waichow to Samtohü, and from Samtohü to Po-sim (Route 16, mile 15½). There is a considerable trade, principally in fish, firewood, charcoal, &c.

The river is some 100 yds. broad throughout and offers no difficulties to navigation for boats drawing 2 ft. of water.

The river passes through a rolling plain well cultivated in the valleys, with wooded grass-land elsewhere. There are

several large villages on the river bank, and the country is fairly populous.

Large junks 60 ft. long, 15 ft. beam, and 1 ft. draught, are available at all large villages. Ferry-boats are sampans 30 ft. long, 7 ft. beam, and 8 in. draught, and accommodate 20 persons.

miles	
0	**SAMTOHÜ,** P. Width of river at starting is 60 yds., and banks well wooded, about 10 ft. high. Bottom of river sandy gravel. Current 1½ mile per hour to Pingshanhü (mile 24¾), after that ¾ mile per hour. 40 junks. Steep hills on l., rising to over 2,000 ft. Much gentler slope on r.
1½	Sharp turn to r.
2¼	Sharp turn to l.
3¾	Small stream comes in from l., with temple at its mouth.
4¼	**Yung-heu,** small village on l.
6¼	Turn to r.
7¼	**P'ing-kung,** market town (200 houses) on l.
8	Tributary on r.
9	Sharp turn to r.
9¼	**Mong-tsiu-kiak,** small village on r.
9¾	Sharp turn to l.
10¼	**Shui-heu,** small village on r. Small tributary on r. W. of village. A hill about 500 ft. high comes down to the r. bank.
11½	**T'u-ts'un,** small village on l.
12½	**Wongkonghü,** P., market village (200 houses) on l. River here takes a sharp turn to r., rounding the spur of a hill 600 ft. high which projects from the S.
13	Sharp turn to l.
13½	Sharp turn to l.
14½	Sharp turn to r.
16¼	Tributary on r.
16½	Sharp turn to l.

miles	
17½	Ford 3 ft. deep The river widens to 100 yds. and skirts the base of a hill 450 ft. high on r.
18½	Sharp turn to r.
19	**Tsim-kok-shui** (50 houses) on l., with tributary stream W. of village.
19½	Sharp turn to r.
21	Sharp turn to l.
24	High ground comes down to river on both sides. **Sam-pao-tu,** village on r.
24¾	**Pingshanhü,** P., market town (500 houses) on l. High road from Nimshan (15 miles on l.) to Waichow crosses here by ferry. (See Route 12.) Telegraph line runs alongside this road. 10 junks seen here.
26¼	**Tai-chiu,** village on r.
27¼	*Sin-liung-t'ap,* 7-storeyed pagoda on l.
29	Turn to r.
29¾	Sharp turn to l.
30¼	River takes sharp turn to r. and passes small village of **Shui-heu** on l., at the mouth of a large tributary coming from **Pakmongfa,** P. (10 miles distant).
31½	Sharp turn to r.
32½	*Mui-tam Tower,* a dismantled blockhouse on a bluff overlooking river on r. River takes a sharp turn to l. here, skirting the base of a hill 500 ft. high on l., and narrows to a width of 50 yds.
34	**Sin-hi** (50 houses) on r. Ferry. The river has widened again to 100 yds. A dry tributary joins the river just short of Sin-hi. There is a post of 40 soldiers here to examine all junks for arms.
34¼	Ferry. The river has narrowed again to 50 yds.
35	Tributary on l.
35¼	Sharp turn to l.
35¾	**Hiung-shu-tam** (30 houses) on l.
36	A creek leaves the main stream and rejoins it 2½ miles further on, forming an island. The main stream turns sharp to r.

miles	
37	**Pingtan,** P., market village (200 houses) on r. A dry tributary joins river on r. shortly before the village is reached.
37½	Turn to l.
38½	Creek rejoins main stream on l. The river has now widened to 100 yds. Higher ground comes down to river on r.
41½	**Pat-sai,** village on l.
43½	**P'ao-lui-tong,** village on l. River is now 200 yds. wide.
45½	**Ng-wu-to,** village on l.
47	**Shui-pui,** large village on r. 30 junks.
47½	Tributary coming from **Maon,** P. (about ¾ mile distant) joins on r. Stream is 20 ft. wide with banks 10 ft. high.
47¾	Ferry. River is now 50 yds. wide.
48	Sharp turn to l.
48¾	Stream 30 yds. broad, with banks 10 ft. high, leading to **Tamshuihü,** P. (25¾ miles distant), joins river on l. Ferry at the confluence (see Route 18).
49	Sharp turn to r. River is now 80 yds. wide.
50½	Ferry. There is a village ¾ mile distant NW. of this point.
52	Small island 10 ft. high in midstream. River 100 yds. wide.
53	Tributary 20 yds. wide, banks 10 ft. high, leading to Maon (3 miles distant) joins on r.
54¼	Sharp turn to l.
55¼	**Tuk-tung,** hamlet on l. River turns sharply to r.
56	Turn to r. River now 150 yds. wide.
58	Sharp turn to r.
59½	Sharp turn to l.
59¾	Turn to l.
61¾	Small creek with stone bridge on r. Road and telegraph line from Pingshanhü to Waichow (see mile 24¾) meet r. bank of river, and follow it.

miles	
62¼	**Kua-mun,** hamlet on l. Temple near by.
62½	Customs station (barge moored to bank on r.). All junks are examined by Customs officers for salt. Telegraph crosses river and follows l. bank.
62¾	**Kwaishin,** P. T., district city on r. The business quarter is the western suburb, which stretches from the West Gate to the bridge of boats communicating with Waichow.
63¾	**WAICHOW,** P. T., a large and flourishing prefectural city which in conjunction with the western suburb of Kwaishin does a large trade with the towns up the river. Supplies obtainable in plenty. (For further description see *Gazetteer.*) River turns sharply to r. and flows into the East River between Kwaishin and Waichow. 70 junks seen here.

ROUTE 18

WAICHOW TO TAMSHUIHÜ

Water Route (40¾ miles)

Authorities: Major R. S. Paul and Lieut. F. W. Thicknesse, September 1912; War Office MS. Map, No. 434 (1913).

General direction, S. This is a direct water route and part of the route from Waichow to the sea. Regular passenger junks run between the two places, and there is a large trade in fruit, salt, &c., to Waichow, and in wood to Tamshuihü.

The first 15 miles of this route are the same as the last 15 of Route 17.

The river is generally 60 ft. wide. Above Wingwu (mile 28) it is full of sandbanks and at low water is not passable for boats above 1 ft. draught. Its course is sinuous throughout.

After quitting the main river the country is dry, only sugar-cane and similar crops being grown. There is much

grass land. The principal industry is cattle-breeding, though near Tamshuihü fruit orchards are common.

The country is hilly above Wingwu.

Plenty of junks 50 ft. long, 12 ft. beam, and 1 ft. draught are available for transport at Waichow, Wingwu, and Tamshuihü.

Ferry-boats are sampans 30 ft. long, 7 ft. beam, 8 in. draught, and accommodate 20 people.

miles	
0	**WAICHOW,** P. T. The route leads up the Sam-tou-chuk River to its junction with the Tamshui River (for details see Route 17, mile 48¾ onwards).
15	Route enters *Tamshui River*. The stream is generally 50 yds. wide, banks 10 ft. high and wooded in places, current 1 mile per hour, sandy gravel bottom as far as Wingwu, after that sand. Average depth up to Wingwu 1½ ft., thence 10 in.
15¼	Sharp turn to r.
15⅜	Sharp turn to r.
16⅜	**Tsou-kai** (30 houses) on r.
16⅝	Temple on r. River turns sharply to l., and takes many sharp turns during the next 4½ miles.
22¼	**Luk-tiang** (50 houses) on r., **Pong-hok-ki** (50 houses) on l.
23¼	Sharp turn to l. about in opposite direction.
24¼	Turn to r.
24½	Blockhouse under construction l.
24¾	**Tam-t'ong** (100 houses) on l. River takes several sharp turns during the next 2½ miles.
27¼	Small stream coming from **Ma-hai** joins on r. River turns to l.
28	**Wingwu,** P. (H. : Yen-fu), market village (100 houses) on l. Bridge across river ; movable wooden planks on small trestles ; a sampan is used for the central span. The bridge is very ricketty ; height above water 1 ft. River turns l.
28½	**Fu-mui,** small village 200 yds. from bank on l. River makes several sharp turns.

miles	
30	Ferry.
31	River winds between hills 500 ft. high on either side.
31¾	Valley widens out slightly for the next 5 miles.
32⅛	*Tam-ya Temple* on l. River turns r. *Lung-chi Temple* on r.
32⅜	**Pok-ha** (30 houses) on l. River turns r. and continues to wind.
33⅞	**Mei-tong-luk** (30 houses) and stream joining river on l.
35½	**Ng-si-liao** (30 houses) on r.
36	**Ngi-liung-kong** (30 houses) and tributary on r. River turns l. in opposite direction.
36¾	Ruined monastery on low hill on r. River turns r.
37	Tributary 10 ft. wide on l.
38	Sharp turn to r.
38¼	Sharp turn to l.
39¼	Sharp turn to l.
39½	*Ko-miu Temple* on l. River turns r. in opposite direction.
39¾	Sharp turn to l.
40¼	**Mong-yao-kong** (30 houses) on r.
40¾	**TAMSHUIHÜ,** P., on l. (see *Gazetteer*).

ROUTE 19

TAMSHUIHÜ TO NGOTOW

Land Route (10 miles)

Authorities: Major R. S. Paul and Lieut. F. W. Thicknesse, September 1912; War Office MS. Maps, Nos. 434 (1913); 181 (1906); 423 (1911).

General direction, SSE. This is a direct land route, only the first 5 miles of which were sketched, the remainder being viewed from the top of a hill.

The road generally is straight and level, and good in dry weather. It is approximately 5 ft. wide throughout, unpaved

and of the same soil as the surrounding country. It is passable for animals, wheelbarrows, and infantry in file; with a little improvement this road could take field guns but not heavy transport wagons. After heavy rain the going would be very heavy.

The country for the first 5 miles consists of an open plain under rice cultivation. Irrigation is effected from ponds. The route then passes through low barren hills of red sandstone until it reaches Ngotow. Trees are few, and there are not many villages. The country is dry and passable for mounted troops. Water is scarce and inferior. Troops could camp almost anywhere along the route. There is a considerable trade in salt from Ngotow to Tamshuihü. Logs 12 ft. long and 9 in. in diameter form the load on the return journey. These are mostly carried on wheelbarrows. Wheelbarrow shafts are 15 ft. long; wheels are solid, $3\frac{1}{2}$ ft. in diameter. About 200 of these, with men to push them, are available. Coolies (mostly women) could also be collected. At Tamshuihü there are usually about 60 junks. Dimensions 50 ft. long by 15 ft. beam, draught unloaded 6 in.

miles	
0	**TAMSHUIHÜ,** P. Route starts S.
$\frac{1}{4}$	Village. Route turns SSW.
1	Village on r. Route turns SSE.
$2\frac{1}{2}$	Village on l.
$6\frac{1}{2}$	Creek leading to **Tun-t'ao,** about 1 mile distant on l. Hill 1,000 ft. high on r. Route turns SE., and winds for the next 3 miles.
10	**Ngotow,** P., at the head of a small inlet in the extreme north of Dumbell Bay. There is a hill $\frac{1}{2}$ mile NE. of the village forming the neck of a small promontory (see Route 14).

ROUTE 20

TAMSHUIHÜ TO LUNGKONGHÜ

Water and Land Route (15 miles)

Authorities: Major R. S. Paul and Lieut. F. W. Thicknesse, September 1912; War Office MS. Map, No. 434 (1913).

General direction, WSW. This is the ordinary route from Tamshuihü to Lungkonghü. The river when traversed was very shallow and great difficulty was experienced, but the natives said it was generally deeper at that time of year. At mile 10½, where the river was left and the land route taken, it was so shallow that seven junks were collected in one place unable to get through. They were eventually compelled to dam up the river in order to get enough water to proceed to Lungkonghü. None of the junks were drawing more than 8 in. of water at the time.

The road is merely an 18-inch mud path among the paddy-fields close to the river.

The country generally is rather dry, but the larger valleys are highly cultivated and very thickly populated. Nipple Hill, so called from its peculiar shape, is a prominent landmark throughout this route. It is 2,500 ft. high, and situated about 8 miles N. of Lungkonghü.

Note.—In estimating the total distance, 25 per cent. must be added to the land distances given in the route to allow for necessary deviations when moving troops along the road.

miles	
0	**TAMSHUIHÜ,** P. Route starts from North gate. Trestle bridge with roadway of movable planks; 25 spans of 15 ft. Stream 50 yds. wide, 9 in. deep. Height of bridge above stream, 6 ft.
¾	**Chap-yu-yen** (30 houses) on r. Stream narrows to 30 yds.
1	Sharp turn to l.

miles	
1½	*Sam-tai-tzŭ*, temple on r. River turns to right about.
2	Tributary, almost dry, joins on r. River is now 80 yds. broad, and turns to l.
2½	**Tu-hu** (30 houses) on l. Road from **Lungkonghü** (10 miles) joins on r.
2¾	Stream 10 ft. wide joins on l.
3½	Sharp turn to r.
3¾	**Si-fu** (H.) (50 houses) on r. River turns l.
4¾	Sharp turn to r.
5¼	Ferry. Depth of water, 2 ft. Width, 50 yds. Capacity of ferry, 20 men. Road from **P'in-san** (H.) joins on l.
5¾	**Sai-wan** (50 houses) on r. Large temple. River now 50 yds. wide. Hill 1,000 ft. high 1¼ mile to r.
6	Dry tributary on r.
6½	Sharp turn to r.
7	**Pak-sha** (50 houses) on r. ; **Yin-fu** (50 houses) on l. Hills 500 ft. high close to bank on r.
7½	Sharp turn to l.
8¼	Sharp turn to r.
8½	Dry tributary on r. River turns to l.
9	**Sam-ka-t'ong,** village of a few scattered houses on l. River makes several sharp turns in the next 1¼ mile.
10¼	Small tributary on l.
10½	Route leaves river and proceeds by road along the bank on r.
12	Culvert over small stream.
12½	**Siong-t'eu** (H.) (50 houses) on r., and bridge across small stream.
12⅝	Road from **Wu-fong** joins on r. ; farm at junction of roads. Rice plain on r.
12¾	Ford across Tamshui River ; 30 yds. wide, 1 ft. deep, sandy bottom, sluggish current.
13½	Ferry over Tamshui River. Capacity of ferry-

miles	
	boat, 30 men. Water 4 ft. deep. Route passes over a small spur.
14	**Tai-san** (50 houses). Road passes through village.
14½	Ford across Tamshui River ; 30 yds. wide, 2 ft. deep, sandy bottom, sluggish current.
15	**LUNGKONGHÜ,** P., small town of 300 houses (see *Gazetteer*).

ROUTE 21

LUNGKONGHÜ TO PINGWU

Land Route (14 miles)

Authorities : Major R. S. Paul and Lieut. F. W. Thicknesse, September 1912 ; War Office MS. Maps, Nos. 434 (1913), 415, Sheet 3 (1911) ; Map of Canton–Kowloon Railway, Chinese Section.

General direction, W. This is the ordinary road from Lungkonghü to the Canton–Kowloon Railway. The route leaves Lungkonghü by the Wongkong paved road proceeding due W. At mile 1½ it leaves the Wongkong road and proceeds in a north-westerly direction, crossing the Lungkong River by a bridge 50 yds. long and 1 ft. broad. There is, however, another better bridge ¼ mile N. of this. After crossing two low spurs, the road debouches at mile 3½ on to a large stretch of moorland, and turns due W. The road is here a cart road 5 ft. wide and continues so to Pingwu. It does not, however, form the usual road for foot passengers, which only strikes the cart road occasionally. Cart roads also run to various other villages in the vicinity. At mile 5½ the moorland ends and the road continues over spurs and low hills to Pingwu. There is much rice cultivation in the valleys on the latter part of this route. The route has not been reported in detail.

miles	
0	**LUNGKONGHÜ,** P. Route starts along paved road to **Wongkong S.** General direction, W.
1½	Route leaves Wongkong road and turns NW.

miles	
$1\frac{5}{8}$	Road from **Nga-yu-ha** comes in on r.
$1\frac{3}{4}$	Bridge 50 yds. long and 1 ft. wide over Lungkong River. The Nga-yu-ha road crosses the river by a better bridge $\frac{1}{4}$ mile to the N.
$2\frac{1}{2}$	Road crosses small spur coming down from hills on the north. Hamlet on r.
$3\frac{1}{4}$	Road crosses another small spur.
$3\frac{1}{2}$	Hamlet on r. Road turns l. and proceeds W. across moorland. Range of hills on r. Plain with isolated hills on l. Road now becomes a cart track 5 ft. wide.
$5\frac{1}{2}$	Moorland ends. Road crosses low spur with small hamlet on it.
6	Road crosses another spur.
$6\frac{3}{4}$	Hamlet on l.
7	Route turns l. General direction, SW. Road to **T'ong-lok** (3 miles distant) continues due W.
$11\frac{1}{2}$	Bridge over stream (tributary of East River, flowing N.). Route turns W.
$11\frac{3}{4}$	**Pan-tin,** a large scattered village on both sides of the route.
12	Small stream.
$12\frac{1}{4}$	Route turns SW. Hills on r.
$12\frac{3}{4}$	Bridge over stream. General direction, W.
13	Small stream.
$13\frac{1}{4}$	Another branch of stream. Hills recede on r.
14	**Pingwu,** P. RS. (H. : Pin-fu), market village lying to the W. of a small stream. The railway station is about a mile further W.

ROUTE 22

WAICHOW TO LUNGCHÜN

WATER ROUTE (113½ miles)

Authorities: Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, April 1909; War Office MS. Map, No. 378, sheets 1 and 2 (1909).

General direction, NNE. This is the normal route between Waichow, Wanglik, Hoyün, and Lungchün.

The first stage, from Waichow to Hoyün, was traversed with the river slightly swollen by hill rains, and no difficulty was experienced, the average depth being 4 ft. Tide was felt as far as Hoyün; average current 2 knots. For 5 miles after Hoyün the river appeared to be choked with sandbanks. This may, however, have been due to the boatmen's lack of local knowledge, as they had never been above Hoyün before. After this point it rained heavily and continuously for several days and no further difficulties were encountered. The average depth of the river appeared to be 5 to 6 ft. Width of river on first stage 500 to 300 yds., on second stage 250 to 100 yds. Average current 3 knots (floodtime). The average height of the banks throughout is 10 ft., practically perpendicular; soft soil and easily climbable.

The country on the first stage is generally flat for 1 or 2 miles from the river bank. The ground then rises to hills about 1,000 ft. high, the peaks of which generally appear to be 5 to 10 miles from the river, though the river occasionally flows close to the hills.

On entering the second stage the hills come much closer to the river, and the foothills generally rise directly from the banks to a height of 100 ft. Paddy cultivation is carried right up the hills instead of being only on the level as in the first stage.

There is a towpath frequently interrupted by creeks as far as Hoyün. Some of these creeks are crossed by stone bridges. In the second stage the road does not follow the

river. On this stage nearly all the creeks are crossed by long rickety trestle bridges which will only take men in file.

Launches run as far as Hoyün in the summer months if there is enough water. Almost all junks and launches fly a red flag with a yellow diamond in the middle. Junks drawing 2 to 3 ft. can reach Lungchün without much difficulty, but the average draught is shallower than this in order to give greater speed against the heavy current. Average size of boats 30 ft. by 10 ft. The river is reported to be navigable by shallow-draught junks as far as Hopeng, and by shallow sampans as far as the Kiangsi border. Boats available in fair quantities throughout.

Two large tributaries are the Wingon Kong at mile 41 and the Siu Kong at mile 72.

The country is poor. Wood-cutting appears to be the staple industry, and the wood thus cut is taken down the river in huge rafts to Canton. There is also much bamboo. The rice produced is only sufficient for the needs of the inhabitants and is usually of the despised ' red ' variety.

At market villages and the towns *en route* small quantities of the usual commodities can be obtained. Lungchün has a large trade, and more supplies are available here than elsewhere.

In 1909 there were guard boats with about 15 soldiers at almost every village as far as Hoyün.

miles	
0	**WAICHOW,** P. T. Starting from the bridge of boats between Waichow and Kwaishin, the route at first goes E., leaving the extensive suburbs of Kwaishin on the r. hand.
¾	**Kwaishin,** P. T., district city on r. (see Route 18). Route turns N.
1¾	Small blockhouse on a spur overlooking the river on l.
4¾	**Hu-ts'un** (H.) (60 houses) on l.; **Tuk-cho** (H.) (100 houses) on r.
5¼	Small affluent on r.

miles	
6	Village on l.
7¾	**Tsatyüwu,** P. (H. : Tsat-nei-fu), large village on l. Affluent, 30 ft. wide on r., with islands at its mouth submerged in flood time. Up to this point the *Shong-lo San* (H.), hills, 3,000 ft. high, about 6 miles to W. Paddy cultivation, 1 to 2 miles broad on both banks.
8	River turns E.
8¼	**Chung-kok-liang** (H.) (150 houses), 1 mile from the river on l.
10¼	**Pong-tsun** (H.) (30 houses) on l.
10½	Affluent 20 ft. wide on r.
12½	**Shuihowhü,** P. (150 houses) on r., at foot of spur coming down to river. Rice plain. Road from Waichow to Wanglik, 5 ft. wide, good surface, carried on dyke through the plain.
13½	Cultivated island, ¾ mile long by 200 yds. wide.
13¾	**Wong-sha** (H.) (30 houses) on r.
14	Village of 20 houses ½ mile distant on l.
14½	Islands.
15¼	**Yuan-yao** (H.), village on l. ; **Yuan-liang** (H.), village on r.
17¼	Spur on r.
18	Island under cultivation. Route turns NW.
18¼	**Wanglik,** P., large market village (400 houses) on r. Good shops. 4 ft. paved road running E. 50 wheel-barrows. A small creek runs into the East River just N. of the village.
19¼	**Shek-t'ao** (30 houses) on l. ; **Sên-tsun** (H.) (40 houses) on r. *Ai-pi-t'ap* (H.), pagoda 4 miles distant on r.
19¾	Affluent 60 ft. wide on r. Village of 20 houses just beyond. Hills 700 ft. high close to river on l.
22¼	**Am-shui-t'ang** (H.) (20 houses) on l.
22¾	Route turns NE.
24¾	Route turns NW.

miles	
25	**Che-po** (H.) (50 houses) and pagoda 1 mile from river on r.
26¾	Affluent 20 ft. broad on r.
27	Affluent 20 ft. broad on r.
27¾	**Cha-kung-shak** (H.) (30 houses) on l.
28	**Tsao-kao-lung** (H.) (100 houses) on r.
30	Cultivated island, ¾ mile long by 60 yds. wide. Affluent 20 ft. broad on r. Wooded spurs along river banks 100 ft. high, hills 3,500 ft. high, 3 miles to E.
31	Route turns WSW.
32	Route turns N. **Ha-tsang-ts'un** (H.) (150 houses) on l. Large rice valley.
32½	**Shong-tsang-ts'un** (H.) (70 houses) on l. Affluent 60 ft. broad just beyond.
33½	**Shao-leng** (H.) (80 houses) ½ mile distant on l. **Ha-tang** (H.) (30 houses) ½ mile distant on r. Fruit trees.
34½	**Wong-kong** (H.) (50 houses) ½ mile distant on r. Fruit trees. River widens.
35½	Cultivated island, 400 yds. long by 50 yds. wide. Affluent 20 ft. broad on l. Hills 800 ft. high close to l. bank.
37	**Pin-long-tam** (H.) (200 houses) on r. Hills on l. cease. Affluent 20 ft. broad on l. Route turns E., then SE.
39	**Pun-shak** (H.) (40 houses) on l. Route turns NE.
40	Affluent 20 ft. broad on r.
40½	**Ling-tao-ha** (H.) (20 houses) and another small creek on r. High hills (3,000–4,000 ft.) 1 mile from river on r.
41	**Kunyumkok,** P., large and dirty market village (500 houses) on l. Plenty of supplies. The *Wingon* (or *Ts'iu-hiong*) *River*, 100 ft. wide, joins on r. Route turns N.
41½	Route turns E. Peculiar saddle-shaped hill 2 miles from river on r.

miles

43½ **Hao-hiong** (H.) (60 houses) on l. ; **Ts'iu-hiong** (H.) (150 houses) on r., at the mouth of another branch of the Wingon River, 40 ft. broad. Route turns NE.

44½ Hills 600 ft. high on each bank.

44¾ **Lam-kei** (H.) (20 houses) on r.

45¼ **Niu-kiu-shak** (H.) (40 houses) on r.

45½ Hills recede to l. Two small islands.

48¼ Route turns N. Hills recede on r.

48¾ Affluent 30 ft. broad on r. Route now goes NNW.

51¾ **Tsao-sha** (H.), Hoklo village (60 houses) on r. Affluent 50 ft. wide, with large island at mouth.

Mo-yuen (H.) (45 houses) and small creek on l.

52¾ **Kuchuk,** P., market village (150 houses) on r. Basel Mission Station, a conspicuous white building, 2 miles distant on r. Camp for 2 battalions overlooking a paddy plain (dry in April 1909), dotted with low hills.

53¾ Route turns N.

54¼ **Siao-pu-t'ong** (H.) (40 houses) on r. Route turns W.

56¼ Steep bluff on l. Route turns N.

58¾ Affluent 30 ft. wide on r.

61¾ **Kao-k'iu** (H.), village on r. ; **Sin-k'iu** (H.), village on l.

65¾ **Ham-tao** (H.) (30 houses) and creek 20 ft. broad on r.

67 Village of 12 houses and creek 60 ft. broad on l.

67¾ **Shak-kung-shin** (H.) (120 houses) on r. Hills 1,200 ft. high, with conspicuous outline, 5 miles to W.

68½ Long narrow island.

70¾ *Ho-nyen-t'ap* (H.), Hoyün pagoda on spur of hills close to bank on l. ; river bends round spur.

71¾ Pagoda on l.

72 **HOYÜN,** P. T. (H. : Ho-nyen) district city, on l. (see *Gazetteer*).

72¼ The *Siu Kong* (or *Sin-fung Kong*), a river 200 ft. wide, flowing from the NW., here joins the East River on l. On it are the cities of **Chongning** and **Linpingchow.**

miles

It offers a means of communication with the headwaters of the North River and the *Tsêng* (or Lungmoon) River, which flows into the East River below **Sheklung** (see Route 36). Its northern branch also provides another route from Kiangsi province. The country it flows through is very mountainous, and much wood is sent down it for Canton and places in the Delta.

Route turns ENE. Much shoal; average depth for next 7 miles, 1½ ft., and scarcely any channel.

72½ Village of 40 houses on l.

74 Temple on r.

75 Route turns E.

76 Route turns N.

76¼ Affluent 50 ft. wide on r. Rice valley.

77¼ Route turns sharply E.

78¼ **Tailung,** P. (H.: Tei-lung) (200 houses), ½ mile from bank on l.

78½ Affluent 100 ft. wide on r., coming from SE. Lime-kilns on l.

78¾ **Ku-un-t'ong** (H.) (150 houses), 1 mile distant on r.

79¼ Small creek on l.

79¾ Village of 20 houses on l.

80¼ Route turns N. Hills 300 ft. high on r.

81¼ Small creek on l. Route turns E.

83¼ Village of 30 houses in break in hills on r.

84¼ **Fung-kêng-yang** (H.) (150 houses) on r.; village of 40 houses on l. Foothills recede on r.

86¼ Straggling village of 60 houses on l.

86½ Affluent 100 ft. wide, with bamboo trestle bridge, on r. **Ihop,** P. (H.: Ngi-hap), market village of 120 houses just beyond.

87½ Route turns N. Foothills close to river.

89½ Sharp turn to SE. Rapids and narrow gorge.

90 **Kuei-sa-t'ong** (H.), market village (50 houses) on l.

90¼ Route turns N.

miles	
91	Route turns E.
92¼	**Tsiang-kai** (H.) (100 houses) at the mouth of a creek 80 ft. wide on l.
93¼	Route turns S.
93½	Affluent 40 ft. wide on l.
94	Sharp double turn to N.
	Wongtin, P. (50 houses), on r., at the mouth of an affluent 60 ft. wide, with bamboo trestle bridge. High wooded hills close to river on l. Much fir.
97½	**Hok-tang** (H.), hamlet on l. River turns E.
98½	**Pai-to** (H.) (60 houses), on l. Bridged creek 100 ft. wide on r. Route turns NE.
99½	**Shak-pao** (H.) (40 houses) on r. Affluent 100 ft. wide on l., coming from a village about 1 mile to NNW. Route turns N.
100½	Affluent 100 ft. wide, with brick bridge, on r. Route turns E. Large island, with dry sandy bed of river on its N. side.
101¼	Affluent 100 ft. wide, with brick bridge, on r., and pagoda ¾ mile from its mouth. Route turns N.
101½	**Lamhow,** P., large market village (300 houses) with Mission Station on r. Large rice plain. Big trade in wood.
102	Route turns W. and rounds a steep spur on l.
102½	Village of 20 houses on l. Route turns NE.
103½	Bridged creek 60 ft. wide on l.
104½	River turns and twists through a narrow gorge, with rocky island and rapids.
105	Pagoda on a spur on r.
105¼	**Tsiang-kwun** (H.) (50 houses) on wooded spur above the river on l. Large temple on r. The river here enters a broad rice plain and widens considerably.
106½	Island over ½ mile long. Several large villages in plain on r.
107¼	**Lowshing,** P. (H. : Lao-shang), walled town of 600 houses at the mouth of a creek on l.

miles	
108¼	Route turns E. River re-enters hills.
110¼	Route turns N.
112¼	Pagoda on hills to NE., ½ mile distant. Route turns E.
112½	Affluent 100 ft. wide (flood time) on r.
113½	**LUNGCHÜN,** P. (H. : Liung-ch'on), district city on l. (see *Gazetteer*).

ROUTE 23

LUNGCHÜN TO KILING

Land Route (19¼ miles)

Authorities : Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, April 1909 ; War Office MS. Map, No. 378, sheet 3 (1909).

General direction, E. The road is cobbled throughout and is in good condition. Minimum width 4½ ft., widening occasionally to 8 ft. It is frequently carried through the rice-fields on a raised causeway. Ruling gradient 1 in 6. The bridges are good ; width of roadway 4 ft. The country between Lungchün and Laolung is a rice plain with hills to the S. After Laolung the road runs over spurs and rice valleys of varying extent to mile 9¾, where it rises abruptly about 300 ft. It then runs over a rough wooded heath with large tracts of paddy, gradually dropping to T'ung-k'i-sze at mile 14½. Here another rice plain is met which extends to mile 15¾. The road then crosses a pass at the customs station, and runs through country similar to that at the beginning of the second stage to Kiling. Villages are few. The houses are built of mud bricks. Stage 2 from Laolung to Kiling is the main trade route between the East and Han Rivers. Coolies in great numbers were using this road when the route was traversed. The chief articles carried were pigs, sugar, cloth and paper. These coolies are nearly all women and work for a transport firm.

Plenty of drinking-water is obtainable from the hill streams. There are many boats at Kiling ; approximate size 40 ft. by 12 ft. by 1 ft. draught. Cargo space 20 ft. by 12 ft.

The road crosses to the l. bank of the East River almost immediately after leaving Lungchün, and cuts across the bend to Laolung. In many maps it is shown on this stage as being on the r. bank.

The distance by river to Laolung is about 7 miles, and to Hopinghsien about 30 miles.

miles	
0	**LUNGCHÜN,** P. The road leaves the E. gate of the city and follows the E. wall, finally emerging into rice-fields through a small and dirty suburb.
¼	Stone bridge over small creek running SE. into East River.
¾	Road follows r. bank of East River.
1	**Ho-shon-t'eu** (H.) (100 houses). Ferry worked by 2 boats, each of which accommodates 20 passengers. River 300 yds. wide ; depth in flood-time, 5 ft. Plenty of boats available at Lungchün.
1¼	Camping-ground with space for 2 battalions. Dry grazing land. **Wai-shun** (H.) (50 houses) on r. Road turns E.
2½	Creek 30 ft. wide, bridged by wooden footway on stone piers. Road turns NE.
3½	Open rest house spanning the road.
3¾	Rest house. Road turns N.
4¾	Road meets l. bank of East River and turns E. Memorial arch (*p'ai-lao*) on r. **Shui-pui** (H.) (100 houses) on opposite bank of East River.
5	**Laolung,** P. T., small town of about 700 houses. There is a guild here from which coolies could be obtained in large numbers to act as carriers to Kiling. The road now leaves the East River and goes through rice-fields up a narrow valley following the l. bank of a small stream. Width of road, 6 ft.

miles	
6	Road turns SE. and runs through rice valleys, crossing wooded spurs of the hills following the direction of the stream
6½	Rest house.
7	Road turns NE.
7¼	Road turns S. and then SE.
7½	Rest house.
8½	Two dilapidated tea shops serving as rest houses. Road turns E.
8¾	Road on r. running SE. to **Sun-tam-sin** (H.). Brick bridge over stream.
9¼	Stone bridge over stream.
9¾	Hamlet of 5 houses. The road now turns sharply to r. (direction SSE)., ascends a steep well-wooded hill 300–400 ft. high, gradient 1 in 6, and enters a dry heath with occasional cultivation.
11¾	Rest house. Various tea shops.
12	Long straggling village in dry paddy. Houses of mud bricks.
14	Rice plain begins.
14½	**T'ung-k'i-sze** (H.), small town of 400 houses. The road turns E. and then NE. across a rice plain dotted with farm-houses, mostly ruinous.
15½	**Hi-long** (H.) (20 houses) among trees.
15¾	**Tin-liang-kai** (H.) (100 houses). Route turns ENE. and runs up a broad paved road, gradient 1 in 12.
16¼	Likin station. Road descends 1 in 12, general direction NE.
16¾	Road becomes level.
17¾	Road strikes a stream on l., 1 ft. deep and 20 yds. wide, running over rocks. A side road leads over the river and runs through a rice plain.
19¼	**Kiling,** P. (H. : Kai-liang) (200 houses), head of navigation on the Mei or Western Han River. 60 to 100 junks available

ROUTE 24

KILING TO HOHOW

Water Route ($39\frac{3}{4}$ miles)

Authorities: Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, April 1909; War Office MS. Map, No. 378, sheet 4 (1909).

General direction, E. by S. As far as Chonglok, the river is practically a torrent. Width 20 yds.; depth 6 to 18 in.; current 4 to 5 knots. The hills come down to the water's edge, and are covered with bamboo and other vegetation. A solitary farm or hut is occasionally seen on the river bank. The river takes many sharp twists and turns. Sharp corners are turned by running the bow into the bank and letting the stern swing round.

After Chonglok, the river is broader and more navigable. Width 30–40 yds.; depth 2 to 3 ft.; current 2 to 3 knots. In places rice-fields of moderate extent are passed. Hills 200 ft. high close to the river. On this stage the river is frequently blocked by bamboo fences for fishing purposes, through and over which the boats pass. Boats on this river are 40 ft. by 8 ft. by 6 in. draught.

Wooden bridges at miles $17\frac{1}{2}$, 18 and $18\frac{3}{4}$. Strong bamboo trestle bridges taking heavily laden coolies in file. The country is very hilly, but there are no hills higher than 600 ft. in this section. Several good roads noted in the route are not suitable for vehicles.

Supplies are obtainable at market villages. These are more plentiful than on the East River, and the country is noticeably more prosperous. The houses are clean, but the villages are of the ordinary Chinese type.

miles	
0	**Kiling,** P. Route starts in a northerly direction, leaving Kiling on the r. Width of river, 20 yds.
1	River turns E.
6	Affluent on l., 20 yds. wide. River turns S.

miles	
9½	Affluent on r., 10 yds. wide.
10	River turns E.
14½	Affluent on l., 15 yds. wide.
17½	*Si-tim-pa* (H.), Basel Mission Station, on r. Could accommodate 4 companies.
	CHONGLOK, P., district city (600 houses) on l., ½ mile N. of river, on a muddy creek 20 yds. broad, and lying so low that its streets are usually flooded for about 2 months in the year (see *Gazetteer*).
	River now 40 yds. wide, starting from mouth of Chonglok Creek.
17⅝	Bamboo trestle bridge, over which infantry could pass in file.
18	Affluent on r., 10 yds. wide. Bamboo trestle bridge over river. River turns l.
18¾	*Kiang-ha-t'ap* (H.), 7 storeyed pagoda ¼ mile from bank on l. River turns r.
19¾	Bamboo trestle bridge. Affluent 10 yds. wide on r. River turns l.
21¾	**Ha-tam-shun** (H.) (30 houses) on l.
22	River turns r.
22¾	**Tiao-lung-sai** (H.) (10 houses) on r. River turns l.
24	River turns r.
24¼	**Tsung-wo** (H.) (50 houses) ¼ mile from r.
25	Hamlet of 10 houses on l. Road to **Hingninghsien** (H. : Hin-nen), about 9 miles to NE., crosses river by a ford.
25¼	Affluent 10 yds. wide on l. Road to Hingninghsien crosses this by a stone bridge and turns N. through a break in the hills.
26	River turns r. Conspicuous temple at foot of hills on l. Rice-fields on each bank.
27¼	**Chungtong,** P. (150 houses), ½ mile from r. River turns l.
27¾	Pagoda ½ mile from r. High hills 10 to 12 miles distant.

miles	
28¼	River turns l.
29¼	**Kiung-shui-kok** (H.), market village (300 houses) on l. River takes sharp turn to r. Rice-fields on l., which continue to mile 34.
30	Affluent 20 yds. wide on r. A stone bridge ¼ mile up takes a good road running S. from Kiung-shui-kok.
30¾	River turns l.
31¼	Affluent 10 yds. wide on r.
31¾	**Ng-fu-t'eu** (H.) (15 houses) on l.
32½	River turns l.
32¾	Affluent 40 yds. wide on r., forming an island at its mouth.
33	River turns r.
34	**Kai-tiam-pui** (H.) (20 houses) on l.
34¼	Sharp turn to r. Hills close to river on both banks.
35¼	River turns l.
35¾	Hills recede on r.
36½	Hills recede on l.
37¾	River turns l.
38	**Tai-pu-hong** (H.) (100 houses) ¼ mile from r.
39¾	**Hohow,** P. (usually known as **Ho-kiu-shi** in Hakka), market village of 250 houses. River here joins the main branch of the Mei River (Mui Kong), flowing from the SSW.

ROUTE 25

HOHOW TO SAMHOPA

Water Route (82¼ miles)

Authorities: Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, April 1909; War Office MS. Map, No. 378, sheets 4 and 5 (1909).

General direction, NE. The route follows the course of the Mui (Bue in Hoklo dialect) or Western Han River. Between Hohow and Kaying (mile 44) the average width of the river

is 100 to 300 yds. ; average depth 2½ ft. ; current 2 to 3 knots. In this section the river is fairly straight, and runs through cultivated country with hills 1 to 2 miles from the river banks. At Kuntong (mile 28) high hills come down to the river, receding from it at mile 37½, at which point the country opens out into a broad rice valley. There is a track in this section of an average width of 2½ ft. on both banks. A large affluent from Hingninghsien comes in at mile 11¼.

Between Kaying (mile 44) and Samhopa (mile 82¼) the river winds among well-wooded (pine and bamboo) hills which slope steeply to the water's edge. There is very little flat ground, and the hills are all terraced for rice. The average width of the river is 40 to 120 yds. ; average depth 4½ ft. ; current 2½ to 3½ knots. The most important affluent is one which comes in on the left at mile 59¾ from Chenping Tung. There is a road on the left bank only as far as mile 58¾, from which point onwards there is a road on each bank. Its average width is 4 ft. At mile 66 there is an iron girder bridge across a large creek, completed in April 1909.

There are many rapids throughout the route which would much hinder navigation in the dry season.

The only boats in use on this river are those called at Swatow ' paper boats '. These are about 40 ft. long, 8 ft. beam, and 1 ft. draught when loaded. Height of deck-house 5½ ft. They have a very curious high prow which is used in poling. These boats are either poled or rowed. If the wind is fair, they put up their bamboo awnings and other light sails. No towing is done on this route.

The country is prosperous, as many of the inhabitants emigrate to the Straits Settlements and return to their native district with the money they have earned abroad. Education is very cheap. Nearly everybody can read and write.

The chief industries are paper-making and charcoal-burning.

A small force posted on the hills could deny the passage of the river in any place.

miles	
0	**Hohow,** P. Route proceeds N. down the *Mui Kong*, leaving Hohow on r.
1	**Ts'it-tu** (H.) (40 houses) on l.
1¼	River turns r.
2	**Nao-t'eu-shak** (H.) (40 houses) on r.
4	River turns r.
5	Hamlet of 10 houses on r.
6	Affluent 10 yds. wide on r. River turns l.
7	**Ssŭ-kao** (H.) (50 houses) on r.
7½	*Ssŭ-kao-t'ap* (H.), pagoda and temple on spur at turn of river on l. River turns r.
9¼	**Wong-shak** (H.) (40 houses) on r. River turns l.
11¼	**Shuihow,** P. (H. : Shui-heu-shi), market village (400 houses), on r. River from Hingninghsien (10 miles distant), 50 yds. wide, comes in on l. Pagoda ½ mile up on r. bank of this river.
12¾	River turns l.
13	Hamlet (5 houses) on l.
14	**Chung-fung** (H.), village of 60 houses on both banks. Creek 20 yds. wide on each side of the river.
14¼	River turns r.
15¼	Village of 30 houses on l. River turns l.
16½	Scattered village on both banks. Affluent on l.
18	**TSIAHANG,** P. (H. : Ts'ia-hang-shi), a busy and prosperous market town (700 houses) on l. Several pagodas, one of which is of a particularly elegant and unusual form. A ferry with 4 boats runs across the river here in connexion with the road leading SE. to **Fungshun** (25 miles), **Kityang,** and **Swatow.**
20	River turns r.
21¼	Affluent 20 yds. wide on r. **Tiao-tzŭ-shak** (H.), 1 mile distant up creek.
22¼	River turns l.
24¼	**Shui-t'ai** (H.), village of 40 houses on both banks.
24¾	River turns r.
25¼	Affluent 10 yds. wide on l.

miles	
25½	**Miao-tsao-hi** (H.) (10 houses) on l.
25¾	River turns l.
26¼	Small creek on l. Pagoda on spur of hill 1 mile distant on r.
26½	River turns r.
27¼	Hamlet on l.
27¾	Affluent 15 yds. wide, with stone bridge, on r. River turns l.
28	**Kuntong,** P. (H. : Kon-t'ong-shi), market village (150 houses) on r. Large square market-place surrounded by shops. High hills behind.
29¼	River turns r.
29¾	Affluent 10 yds. wide, with stone bridge, on l.
30¼	**Kon-ssŭ-liong** (H.) (50 houses) and affluent 10 yds. wide on r.
31¼	Affluent 20 yds. wide on l. **Sin-t'ong** (H.) (80 houses) at its mouth on the l. bank. River turns l.
32	River turns r. Hills close to bank on r.
33	**Lo-yi** (H.) (40 houses) on r., in rice valley.
33½	Affluent 10 yds. wide on r., with bridge.
34	*Lo-yi-t'ap*, pagoda on r. Rapids. River turns r.
34½	River turns l. Affluent 10 yds. wide on r.
35¼	**Chongsha E.,** P. (H. : Ch'ong-sa-shi), market village (100 houses) at the foot of a spur on r. Also a few houses opposite on l.
36¼	River turns l.
36¾	**Wan-ha** (H.), hamlet at mouth of small creek on r.
37½	Conspicuous temple on r. River turns l.
38½	**T'ai-sa** (H.), village of 100 houses on both banks. Country opens out a little. Rice plain. High hills 1 to 2 miles S.
38¾	Bridged creek on l. River curves gently to r.
41½	Pagoda ¼ mile distant on r.
44	**KAYING,** P. T. (H. : Ka-yin-chu), walled city on l. (see *Gazetteer*). Just before reaching the city, an

miles	
	affluent 30 yds. wide comes in on l. River makes a sharp turn to r.
45	Suburbs of Kaying end. River turns r.
45¼	Affluent 10 yds. wide, with stone bridge, on l. River now flowing nearly S.
46¼	**Tsiu-t'ong** (H.) (60 houses) on r. River makes a sharp turn to l.
47¼	River turns l. and flows N.
48½	Hamlet of 10 houses on r. River makes a sharp turn to r. Creek 5 yds. wide, with stone bridge, on l.
49½	River turns r.
50½	River turns left about.
50¾	**Si-yong** (H.) (40 houses) on r.
51	River turns l.
51¼	River turns r. Affluent 20 yds. wide on r.
52	Another branch of the same affluent, 10 yds. wide, comes in on r. Large waterwheels for irrigation are to be found near the mouths of most of the hill streams in this section.
52¼	River turns l. Hills on both banks.
53	River turns r.
53½	Affluent 15 yds. wide, with stone bridge, on l.
55½	**Sai-wo-t'an** (H.) (40 houses) on r. Affluent 10 yds. wide, with stone bridge, on l. Rapids. Hakka women act as trackers for boats going up stream—about 16 to each boat.
56¾	Affluent 5 yds. wide on r. River turns l.
57¾	River turns r. Hills recede from river on l.
58¼	Island, 200 by 40 yds.
58¾	**Pingtsün,** P. (H. : Piang-ts'un-shi), market village (150 houses) on r.
59¾	Affluent 40 yds. wide, coming from **Chenping Tung,** 30 miles distant, on l.
60¼	**Chin-p'in-mi** (H.), scattered village of 30 houses on l.
62	Hills again close to river.

miles

63¾ **Yi-ti-kua** (H.) (10 houses) and affluent 10 yds. wide on r.

64¾ **Wang-san** (H.) (50 houses) on l.

66 Affluent 30 yds. wide, with iron-girder bridge, on l. **Wong-sa-t'am** (H.) (50 houses) on its l. bank near the mouth.

66¼ Affluent 5 yds. wide on r.

67½ **Kam-lo-t'in** (H.) on l.; **Tsungkow,** P. T. (H.: Ts'iung-k'eu) on r.; together forming a market town of 300 houses. The houses here are unusually high, nearly all of 3 or 4 storeys. Hills recede on l. Open fertile plain.

68¾ Affluent 20 yds. wide on l.

69 7-storeyed octagonal pagoda on l., with small red temple at its foot. Hills close in again.

70 **So-t'eu-sak** (H.) (15 houses) on l. River makes a sharp turn to r.

Tai-p'ung-pin rapids. Terrace cultivation a marked feature of the landscape.

71 River turns r. and flows SSW.

73½ River turns l.

75 River makes a sharp turn to r. Affluent 15 yds. wide on r.

75¾ Bridged affluent 5 yds. wide on r.

76 River makes a sharp turn to l.

77¼ Bridged affluent 5 yds. wide on r.

78¼ River turns l.

79¼ **Yong-cha-ping** (H.) (50 houses) on r. River turns r.

79¾ River turns r. and flows S. Bridged affluent 10 yds. wide on l.

81½ River turns l. and flows E. Blockhouse on hilltop on r.

82¼ **SAMHOPA,** P., market town on r. (see *Gazetteer*). 400 to 500 boats. ½ mile further on the Mui Kong enters the Han River, which is here 100 yds. wide, and flows SSW.

ROUTE 26

YÜNMENLING (KIANGSI) TO KAYING

Land Route (about 75 miles)

Authorities: Zeitschrift der Gesellschaft für Erdkunde zu Berlin, 1913; War Office Provisional Map of the Province of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879.

General direction, SSE. The route starts from Yünmenling on the headwaters of the Kung Kiang, one of the streams which go to form the Kan Kiang, the principal river of Kiangsi. Going due S., the road passes over a mountain range running E. and W. which divides the sources of the Kung Kiang from those of the East River. Changning Ki lies S. of this range on the northernmost branch of the East River, which except for some rapids just below the town is navigable, though with difficulty, all the way to Canton. The mountains now trend in a north-easterly direction and hem the river in a narrow gorge. The route leaves the East River a short distance below Changning Ki and turns SE. Crossing a range of hills which marks the boundary of Kiangsi and Kwangtung, it meets the upper waters of the Ho-t'ou Shui, a tributary of the Mei Kiang, which it follows for some distance. The country consists of low barren hills alternating with flat fertile fields, and finally merges into the plain of the Mei Kiang.

The district is on the whole fairly productive, rice, sweet potatoes and paper being the chief articles produced.

On account of the rapids of the East River, the principal trade route from Changning Ki goes not to Canton but to Swatow via Kaying. There are several coal deposits in the neighbourhood of Kaying, but at present only one mine is being worked, about 6 miles NE. of the town.

The route has not been traversed in detail, and distances are only approximate. Place-names, except those occurring in the Postal Guide, are given in the Mandarin dialect.

miles	
0	**Yünmenling,** P., a busy market town and head of navigation on the Kung Kiang. Route goes S.
4	**Wu-shih-hsia.**
7	**Shih-lo-fên.**
9	*P'an-ku Pass*, over a range of mountains nearly 2,000 ft. high.
11	**Ch'a-ling-tung.**
14	**Têng-chiang-yü.**
15	Route crosses a small stream flowing into East River.
20	**Ta-tang-mien.**
23	**Changning Ki,** P., district city on the r. bank of the *Pao Shui*, a branch of the East River. Route turns SE. and follows the l. bank.
28	Route recrosses stream mentioned at mile 15.
30	**Shih-fei-hsia.**
35	**P'an-ku-ai.**
38	**Niu-ai-shih.** Boundary of Kiangsi and Kwangtung.
40	**Pakchek,** P., a military post.
45	**Ho-t'ou,** village near the source of the *Ho-t'ou Shui*, an affluent of the Mei Kiang. Route follows the course of this river.
50	**Patow,** P., 1 mile distant on l.
58	**Hsiao-chê.** Route leaves river and turns S.
62	Route crosses small affluent of Ho-t'ou Shui.
	Ch'ang-t'ien. General direction, SSE.
65	**Lien-t'ang.**
71	**Hsin-hsü.**
75	**KAYING,** P. T. (see *Gazetteer* and Route 25, mile 44).

ROUTE 27

SAMHOPA TO TAIPUHSIEN

Water Route (10 miles)

Authority: Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, April 1909.

General direction, NNE. The route lies up the main Han River. Breadth of river, 150 yds.; depth, 4 ft.; current, 2½ knots. Steep banks, 12 ft. high, inaccessible in most places. The country is similar to that in Route 25. Boats ascend the Han River as far as **Shak-ha-pa** on the Fukien border. The upward voyage from Chaochowfu takes as a rule 7 days, and the downward voyage 3 days. For about 3 miles above Shak-ha-pa, owing to bad rapids, the river is entirely unnavigable; but smaller junks ply between **Fengshih** and **Tingchowfu** in the province of Fukien, a distance of about 112 miles.

The route has not been reported in detail. About ½ mile above Samhopa, an affluent, the *Ts'ing-yüan Ho*, comes in on the right from **Pinghwo** in Fukien, about 35 miles distant as the crow flies to the ESE. At mile 8½ is a French Roman Catholic Mission Station on l., where two battalions of infantry could be accommodated. At Taipuhsien (H.: T'ai-pu-yen) there are from 500 to 600 junks. The city lies on the l. bank of the river between the mouths of two small affluents.

ROUTE 28

TAIPUHSIEN TO YUN-T'IN

Land Route (22 miles)

Authorities: Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, May 1909; War Office Provisional Map of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879; Chinese Map of the Empire of China, 1863.

General direction, N. The road is a fairly good one, 4 ft. wide in the plain, cobbled in parts, with stone bridges. After

5½ miles the road begins to rise, and narrows to 3 ft. ; it is cobbled as far as mile 10. The route was not traversed beyond this point.

The terracing for rice cultivation is carried up to a height of 2,000 to 3,000 ft. The hills are heavily wooded, principally fir of about 8 in. diameter.

Coolies (generally women) are the only means of transport. There was very little traffic when the route was traversed, but it was raining heavily at the time and the river rose 6 ft. in 18 hours.

The main route appears to be via **Sam-sim** and **Yong-mun,** leaving this route at mile ½.

miles	
0	**TAIPUHSIEN,** P. The road runs between the suburb N. of the city and the stream dividing the suburb from the city.
½	Road leading N. to **Yun-t'in** goes off on l.
	This road rejoins the route traversed at mile 10. Route follows stream ; general direction, NNE.
3½	Road leaves stream. Hamlet of 5 houses close under a spur.
3¾	Village of 40 houses. Road keeps straight on across a rice plain, leaving several small villages on either side.
4	Stone bridge over stream.
4½	Road meets stream.
5½	Road turns l. and leads up a defile 800 yds. long, commanded by a ruined blockhouse. Breadth of defile 30 yds. Height of hills 150 ft. ; gradient 1 in 12.
6¼	Road descends at a gradient of 1 in 10 to a broad valley and turns more to l.
7	Temple on r. Road now turns l. and begins to rise again.
7¼	**Tso-p'et** (H.) (50 houses). Road now rises steeply at a gradient of 1 in 8.
8¾	Rest house. Road rises gently, and inclines to r.

miles	
9	Summit of pass. Road now drops gently ; gradient 1 in 30.
9¼	**Wong-fu-ts'un** (H.) (50 houses) in cultivated valley in hills ¼ mile to r. High peaks behind.
10	**Mao-p'iang,** village near border of Fukien province. Alternative route joins here.
22	**YUN-T'IN** (H.), in Cantonese Wing-ting, in Mandarin Yung-ting,[1] district city on the r. bank of a stream which joins the Han River about 1½ mile above Shak-ha-pa and the same distance below **Fengshih.**

ROUTE 29

SAMHOPA TO CHAOCHOWFU

Water Route (65 miles)

Authorities : Lieut. J. de L. Simonds and Lieut. F. W. Thicknesse, May 1909 ; War Office Provisional Map of Kuang-tung, 1911 ; Chinese Map of Kwangtung, 1879 ; Chinese Map of the Empire of China, 1863.

General direction, S. The route follows the Han River. Depth of water when traversed, 6 to 8 ft. Average breadth 200 to 300 yds. It is sometimes as little as 100 yds., and for about 5 miles before Chaochowfu as much as 500 yds.

There are many boats on the river, mostly carrying coolies for emigration to Straits Settlements and goods to Swatow. They are poled or rowed if the wind is unfavourable. Boats are of two types, one being the 'paper-boat' already described on p. 291, which is the more common type ; the other is slightly larger, with a long but narrow rectangular mat sail. A small river steamer was reported to be building in July 1912 to run from Samhopa to Chaochowfu.

The country is hilly, and foothills come down to the river, in many places rising perpendicularly from the water's edge. Many of the hills are densely covered with pine trees ; the

[1] Not to be confused with Yungting, P., a district city in Hunan.

valleys are chiefly planted with bamboo. There is a large plain near **Liuwong,** and 5 miles before Chaochowfu is reached the country becomes quite flat. Houses are of mud or brick. There is a tow-path on each bank. Numerous tiny joss-houses are to be seen, especially along the river banks, and several lofty pagodas on the hills inland.

The route has not been reported in detail, and distances are approximate only. Place-names, except those occurring in the Postal Guide, are given in Mandarin dialect.

miles	
0	**SAMHOPA,** P., on the r. bank of the Mei Kiang at its junction with the Han River (see *Gazetteer* and Route 25, mile 82¼). River flows SSW.
5	**Taima,** P., on r.
6	River turns l.
10	**Kungchow,** P. River turns r.
12	**Yin-ch'i-t'ang.** River turns l. and flows SE.
14	**Yin-ts'un,** village on r. River turns l.
15	River turns r. **Sungkong,** P., village 1 mile distant on l.
17	**P'u-t'ien,** village ½ mile distant on r. **Wu-ch'a,** village 3 miles distant on l.
19	**Kopi,** P., market town on l. River turns r. and flows SW.
22	**Ch'i-kang,** village on r.
23	**T'ao-hua,** village on l. **San-chou,** village on r.
25	**Fêng-tzŭ-p'ai,** village on l.
27	**T'an-k'ou,** village at mouth of a small creek on l. ; **Tamoa,** P., about 4 miles up the creek.
28	**Suntu,** P., on r. ; **Chuan-shui** on l. General direction S.
30	**T'ang-sha-pei,** village on l.
33	**Chu-k'êng-t'ang,** village on r.
36	**Shên-sha,** village on r. Wheelbarrow roads from **Kaying,** about 36 miles distant to NW., and from **Tonghang,** 25 miles to SW., meet here.

miles	
37	*Fêng-ch'i*, affluent on r., coming from **Fungshun,** about 18 miles distant.
40	**Liuwong,** P., market town on r. Wheelbarrow road to Tonghang.
43	Affluent on r. River turns l.
45	**Kuan-pu,** village on r. River turns r. and flows SSE.
50	**Hsü-ch'i,** village on l.
51	River turns l.
53	River turns r.
54	Village on r. Telegraph line from Kaying crosses river.
57	**Kuei-hu,** village on l.
59	Telegraph line crosses river.
65	**CHAOCHOWFU,** P. T. (see *Gazetteer*). Between Chaochowfu and Swatow (about 30 miles) the river current is more or less uniform and slow, so that both up and down voyages are made in about the same length of time ; junks leaving either place at dusk reach the other town early the next morning.

NOTES TO ROUTES 30, 31, 32, and 33

AGRICULTURE. In the vicinity of Kweitam, Hoifung and Lukfung, the country is chiefly sandy plain. N. of this, ground-nuts, sugar, indigo and other ' dry ' crops are cultivated. In the river valleys rice is grown. From Hopo to Kityang and from Yün-lok to Kityang rice is also general.

ANIMALS. On the plains small Indian bullocks and water buffaloes are often seen, but are used for agricultural purposes, and could not be relied upon for food. Fish and pork are plentiful, but the latter is not wholesome for Europeans. In the rice districts bullocks are not met with and only a few water buffaloes are seen.

WATER. Water is abundant, but should be boiled for drinking purposes.

FUEL. Charcoal and kerosene are to be had in the market towns in fair quantities, and charcoal is a staple article of trade on the river between Hopo and Kityang. Grass cut in the hills is usually relied on for fuel. Timber is not plentiful; what there is grows generally at a high level, the plantations on lower ground having been recklessly cut down and not replaced. In the dry plains, however, in the vicinity of Kweitam small woods of 3-inch fir trees are often seen.

TRANSPORT. **Carts** (see p. 66) were met with on the plain in the vicinity of Kweitam.

Pack animals are not used, but the country is quite suitable for their employment.

Coolies are the usual form of transport. Their hire averages from 80 cents to $1 a day, and they will carry two 40 lb. loads 25 to 30 miles in about 10 hours.

The usual type of **boat** is a 'dug-out', 30 to 40 ft. long, 6 ft. beam and drawing 6 in. to 1 ft., with a freeboard of 1½ ft. A space of 20 ft. in the centre of the boat is covered with matting and affords protection from rain. The boats are strongly built with four or five water-tight bulkheads. They would accommodate 12 to 15 men for a short distance sitting, or 6 to 8 for a night's journey. Cargo boats are of the same build, but slightly longer and broader; 20 per cent. might be added to the previous type in estimating capacity. Weight carried 1¼ ton. Boats of 60 ft. are found from Mienhu to Kityang. They are 9 to 10 ft. in beam, 2 ft. freeboard, and 1½ ft. draught when loaded. They would accommodate 20 men, or 3 to 4 tons of cargo.

Launches. Four launches ply between Swatow and Kityang. They draw 5 to 6 ft. and would accommodate 80 to 100 men. They are about 90 ft. long. Speed about 9 knots. They would be useful for towing large boats with troops or stores (see p. 71).

DIALECTS. On the route from Swatow to Lukfung via Kityang, the Hoklo dialect is universally spoken. Cantonese is spoken in large towns to a limited extent, but only among Cantonese who happen to do business there. From Hoifung

to Kungping Hoklo is also the prevailing dialect. From here to Hopo the Hakka and Hoklo dialects are both spoken, while from Hopo to Kityang the language in general use is Hoklo.

ROUTE 30

SWATOW TO KITYANG

WATER ROUTE (32·4 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. L. Brown, January 1913; War Office Sketch Map, No. 440 (1913); Map of Kit Yeung district, No. 376 (1909).

General direction, NW. The route goes up the Kityang River which for the first 8 miles above Swatow flows in a broad estuary. Thirteen miles further on the route branches off from the main river, which comes in a general easterly direction from Hopo and Mienfu. The two branches (called Pak K'ai and Nam K'ai, 'northern and southern streams' respectively) approach to within ½ mile of each other at Kityang, where they are connected by a small creek. At mile 24·6 a tributary of some importance flows in from Toa-ka, a small town about midway between Kityang and Chaochowfu.

The country is for the most part flat, with a few hills lying away from the river banks. There are several market towns on the route, but villages in general are rather few in number.

miles	
0	**SWATOW,** P. T. RS. (see *Gazetteer*). Route starts NW. up an estuary 3 miles wide.
8·2	Mouth of river properly so called. Width about 600 yds.
9·2	**Chikkung,** P. (Hkl.: Chih-k(ê)ng)[1] (300 houses) on r. Route turns l. and proceeds W.
12·6	River 700 yds. wide. Hills 300 ft. high on l., 800 ft. high on r., about 1 mile from banks. Hills are rocky and steep.

[1] Map, No. 376 has 錢江 Ts'in-kong.

miles

14·3 **Kwanfow,** P. (Hkl. : Kun-p'ou), town of 300 houses on l. Water transport for 300 men available along the bank. Route turns r. and proceeds NNE.

19·2 Route turns l. Creek on r. connecting with the delta of the Han River at **Ampow.**

Paotai, P. (300 houses) on r. Width of river 600 yds. Telegraph crosses the river here on fourfold poles 200 ft. high.

20·8 Main branch of river (*Nam K'ai*) comes in on l. There is a bar at its mouth which offers an obstacle to steam-launches at low water, but otherwise the river is easily navigable. The branch followed in the present route (*Pak K'ai*) flows down from Tonghang (see Route 29, mile 36) about 20 miles distant from Kityang as the crow flies.

Route turns r.

22 Route turns l.

24·6 *Pêng K'ai*, an affluent 200 yds. wide, flows in from **Toa-ka** (Hkl.), 9 miles distant, on r. **Pêng-k'ao** (Hkl.) (200 houses) on its r. bank at the mouth. Width of channel 400 yds. Surrounding country plain on both banks. Banks 15 to 20 ft. high, with gentle slope. General direction, now NW.

26 **Kukoi,** P. (Hkl. : Kuk-k'i) (600 houses) on r. at the mouth of a small creek. Width of river 250 yds.

Approximate depth 8 ft. Banks fair for landing. Country generally flat. Some hills 300 ft. high on l., at some distance from river. Very little transport obtainable.

28 Route turns l. and goes S.

29·4 Route turns r. and goes W.

32·4 **KITYANG,** P. (Hkl. : K'it-ien), district city on l. (see *Gazetteer*).

ROUTE 31

KITYANG TO LUKFUNG

Land Route (67·7 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. L. Brown, January 1913; War Office Sketch Map, No. 440, 1913; War Office Provisional Map of the Province of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879.

General direction, SW. This is the normal travelling route from Kityang to Lukfung, Hoifung and Swabue. The route may be said to be the average type of main road in Kwangtung. It has the following disadvantages: (1) It is for 80 per cent. of its length merely a 3-ft. path. (2) There are 27 bridges of over 30 ft. in the 67 miles. Some of these would be difficult to replace in the wet season with the very meagre supply of bridging material at hand. (3) It lies amongst hills affording good defensive positions to an opposing force. On the other hand, camping-grounds with good water are numerous, and billeting is possible in most of the large towns.

The projected railway from Swatow to Waichow will probably follow this route.

There are few trees in this part of the country. Though carts are seen on this route, their use is local and restricted.

All place-names, except those occurring in the Postal Guide, are given in Hoklo.

miles	
0	**KITYANG,** P. The road strikes S. along a concrete causeway 4½ ft. wide. Paddy cultivation on either side. The southern branch of the river (*Nam K'ai*) is crossed by ferry immediately on leaving Kityang. Breadth of river, 300 yds. Depth, 6 ft. to 8 ft. low water. Accommodation for 60 men at one time in two boats. Banks muddy. Small pier 3 ft. broad for landing on either side.
0·6	2-span stone bridge 30 ft. long over small creek.

miles

Width of roadway 6 ft. Depth of stream about 1½ ft. low water. Concrete causeway continues.

1·7 Ferry over river 200 yds. wide. This is a branch of the Nam K'ai which leaves the main stream about 2 miles N. of this point and ¾ mile above Kityang, and rejoins it 3 miles to the E. Another creek continues ESE. and meets the river in two places 3½ miles and 4¾ miles respectively further down stream. Accommodation for 20 men at one time in one boat. After crossing the ferry, the road skirts a range of hills on r. The road is of gravel and varies from 3 to 6 ft. in width.

1·9 **K'ao-k'oi,** village of 60 houses on l. Branch road to **Sua Sua^{n} Kia^{n}**, about ½ mile to l.

2·2 **Seen-sua-bui,** village of 100 houses ¼ mile to l.

3·3 Rest house at foot of hills on r. The road is sandy bund, and only 2 ft. wide in places. On the foothills it is 6 ft. wide and dry, though still flat. Telegraph line follows road roughly.

2-span stone bridge, 20 ft. long and 2 ft. wide. Stream dry in January.

4·4 **Kui-ting-ng** (60 houses) on r.; **Sih-ting-ts'ou** (100 houses) on l. Hills known as *Hun-p'ou-sua^{n}* rise to 800 ft. on l.

4·7 3-span stone bridge, 45 ft. long, 3 ft. wide. Stream dry in January.

5·4 **Hun-p'ou,** village of 100 houses. Up to this point water is scarce, but here are water reservoirs for 5,000 men. Water must be boiled. Timber up to 8 in. may be cut here.

6·1 2-span stone bridge, 40 ft. long, 3 ft. wide. Stream dry in January.

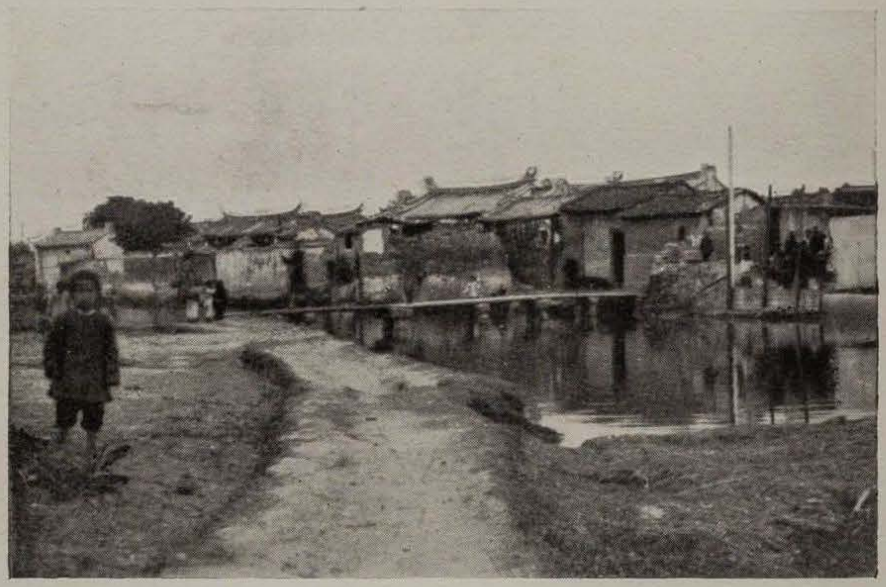
6·7 **Kuên-t'ai,** market town of 80 houses at foot of the range that has been followed. General nature of route to this point: gravel, level, width 3 to 4 ft.

7·3 Stone bridge 30-ft. long, 4 ft. wide. Three 12 ft.

miles	
	spans. Depth of water, 16 in. Current flows l. to r. *Puning River* $\frac{1}{4}$ mile distant on r.
8	Bridge 40 ft. long, 4 ft. wide. Three 12-ft. spans. Stream dry in low water season. Probably rises to 4 or 6 ft. in summer. Current l. to r.
9·1	**Ou-lai** (100 houses). Nature of country as before. This village is situated practically at the end of the range that has been followed. There is camping-ground in the vicinity for 2 brigades, with water from a large lake.
10·3	Stone bridge 50 ft. long, 4 ft. wide ; 4 spans of 12 ft. Stream dry at low water season.
11	**P'ak-t'ou-sua^n** (60 houses). From mile 11 the road lies between low hills and cultivation, the range of hills being left behind. From here on to Puning the road is 3 ft. wide and paved.
11·5	**PUNING,** P. (Hkl. : P'ou-ning), district city of 20,000 inhabitants (see *Gazetteer*). The city itself is small, being some 600 yds. in perimeter only. The town is in telegraphic communication with Kityang.
1·7	East gate of Puning. The road is 4 ft. wide and paved with stone. General direction, S. by W.
12·7	Village of 100 houses on r., surrounded by trees averaging 4 in. diameter.
13·5	At this point the paving ceases, and the road is 3 ft. wide and of gravel.
14	Village of 100 houses.
15·5	**Pi-hao** (100 houses). Camping-ground on l., 800 by 200 yds., at an elevation above surrounding country of 70 ft. Country well cultivated (dry crops) and interspersed with small hills rising 150 ft. above road level.
15·9	Stone bridge 30 ft. long, 5 ft. wide ; 3 spans of 10 ft. Banks steep and 6 ft. high ; 6 in. of water at dry season. Stream flows l. to r.
16·6	A long valley is entered. Hills on either side some



TRESTLE BRIDGE OVER LENGKANG RIVER



TUNG-T'A-T'UI BRIDGE

miles	
	1,200 to 1,500 ft. high and steep ; those on l. are steeper. Thick undergrowth on the hills. The valley is 2 miles wide. Road still 3 ft. wide and of gravel.
17·1	**T'ei-heng** (80 houses). Road is raised on a bund and follows a river-bed 60 yds. wide.
17·5	Stone bridge over river. Width, 3½ ft. ; total length, 90 ft. Six spans of 12 ft. and one of 15 ft. ; 6 in. of water in dry season. Banks are steep and 10 ft. high. Alternative route goes off here to r.
17·7	**Toa-pa,** market village of 200 houses. The river skirts this village on the right-hand side. High hill 2 miles to l.
17·9	Branch road to **Hung-nui-kia**^{n} on r.
19·1	Large village (350 houses). Country still flat.
19·5	5-span stone bridge 60 ft. long, 6 ft. wide ; 3 ft. of water in dry season.
20	**K'o-ling,** market village of 600 houses. Hill 2 miles to r.
20·2	6-span stone bridge, 72 ft. long, 3 ft. wide ; 3 ft. of water in dry season. Banks 3 ft. above water.
21·2	**Wushek E.,** P. T. (Hkl. : Ao-cheuk), market town of 250 houses. Camping-ground for 2 brigades in the vicinity. Stone bridge 34 ft. long, 7 ft. wide, 4 spans of 8 ft. ; 3 ft. of water in dry season. Road 2 ft. wide, partly paved, partly gravel.
21·8	Village of 20 houses on r.
22·1	Branch road to l.
23·2	Road has crossed a broad plain running NW. to SE., and now enters a long valley between hills rising to 1,200–1,500 ft.
23·8	**Tung-t'a-t'ui** (130 houses). Stone bridge 80 ft. long, 4 ft. wide ; 5 spans of 15 ft. ; 1 ft. of water in dry season.
24·2	Stone bridge 50 ft. long, 5 ft. wide ; 4 spans of 12 ft. Stream carries 4 ft. of water, but practically dry at low water season.

miles

24·8 **Kao-hêng-kia^{n}** (40 houses) on r. Also ¼ mile to r. is the village of **K'ai-k'ao** (30 houses). The road winds along, crossing and recrossing the river, rising gradually as the head of the valley is approached. The hills on either side are somewhat steep and covered with scrub. Trees are scarce.

25·8 Stone bridge 90 ft. long, 5 ft. wide ; 5 spans of 15 ft. Water 2 ft. deep at dry season. The near bank is 5 ft. high and steep ; the far bank is sloping.

26 **Hun-hok** (100 houses). From this point there is a sharp rise of 1 in 7 for 50 yds. and then 1 in 20. Road is of sand and gravel and 3 ft. wide. Hills covered with fir trees 4 in. in diameter on r. The valleys are terraced with paddy-fields.

Road follows the course of a small stream, keeping some 60 ft. or so above it.

26·1 Halt on r. large enough for 2 brigades.

26·7 Road rises another 150 ft.

26·9 Camping-ground for 2 brigades, water from stream. Hills rising 150 to 200 ft. above road level. Road 2 ft. wide, of sand and gravel. Stone bridge 40 ft. long, 3 spans of 12 ft. Depth of stream 2 ft. at low water. Banks easy. There is also a small tributary near bridge.

27·2 Road emerges on to a plain. **Tsin-tse,** market village of 100 houses on r.

27·8 Stone bridge 90 ft. long, 4 ft. wide ; 7 spans of 12 ft. ; 1 ft. of water in dry season.

28 **Yen-lok,** market town (200 houses). Suitable for billeting. Good space for a few horses outside town. From Yen-lok the road is of gravel, 3 ft. wide and level for ⅛ mile. On l. is the main range of high hills containing *P'en-sua^{n}*. On r. are low foothills 100 to 150 ft. high.

28·2 Rise of 1 in 20. Road 2 ft. wide, gravel surface.

miles	
28·7	Level road. The lower hills are grass-covered. Paddy cultivation in valleys.
29·1	Stone bridge 47 ft. long, 6 ft. wide ; 3 spans of 15 ft. Depth of water 18 in. at dry season. Far bank is steep and 5 ft. above river. Road leads downhill 1 in 15 to this bridge.
29·3	Rise of 1 in 50. Road passes through orange groves.
29·9	Road rises through 1 in 30 to 1 in 10, when it is paved with steps 3 ft. wide. In this way the road emerges on to a dry plain winding among small hills. The surface is of gravel and mud, bad in wet weather.
30·6	Stone bridge 65 ft. long, 6 ft. wide ; 4 spans of 15 ft. Depth of water 3 ft. A sharp incline of 1 in 15 down to and up from this stream.
30·8	**T'ên-sên** (H. : Tien-sim), walled village of 50 houses to r.
31·3	Stone bridge 47 ft. long, 4 ft. wide ; 3 spans of 15 ft. Depth of water in dry season 2 ft.
31·7	Steep ascent for short distance of 1 in 30. Road 3 ft. wide ; paved steps.
32·2	Road drops again to river. Stone bridge, 6 ft. wide, of seven 15 ft. spans. Width of river averages 100 ft. ; at dry season 20 ft. Depth of deepest channel 5 ft. at low water.
33·2	Stone bridge, 300 ft. long, of eighteen 15-ft. spans. 5 spans broken away by floods in May 1912. Depth of water in dry season 2 ft. Camping-ground sufficient for 2 brigades.
33·5	**Pêng-k'êm** (150 houses). 3-span stone bridge 45 ft. long, 4 ft. wide ; 1 ft. of water in dry season (see Route 5, mile 24).
33·9	Road runs close to river on r. River 150 ft. wide, with banks 4 ft. high. The low hills on r. are slightly wooded (3 in. fir) and grassy. The road is 3 ft. wide and chiefly of gravel, though paved in places.

miles

34·6 Road along valley among paddy cultivation. The hills become lower.

35·9 Foot of small pass. From here the road has a gradient of 1 in 7 and is paved in steps till the top of the pass is reached.

36·1 Top of pass, 160 ft. above the valley. After the pass the road turns more S., descends at a gradient of about 1 in 20, and after winding among hills emerges on to a dry shingly plain whereon are many low grass hills, gradually becoming lower until a flat plain is traversed.

37·9 11-span stone bridge, 165 ft. long, 6 ft. wide, over branch of Kweitam (or Lengkang) River. 2 ft. of water at dry season. Steep banks 8 ft. high. Road 3 ft. wide, of sand and gravel. Camping-ground for 2 brigades on l.

39·4 Cross-roads. **T'ao-t'ên** (20 houses). Branch road joins from left rear from **Heang-li.**

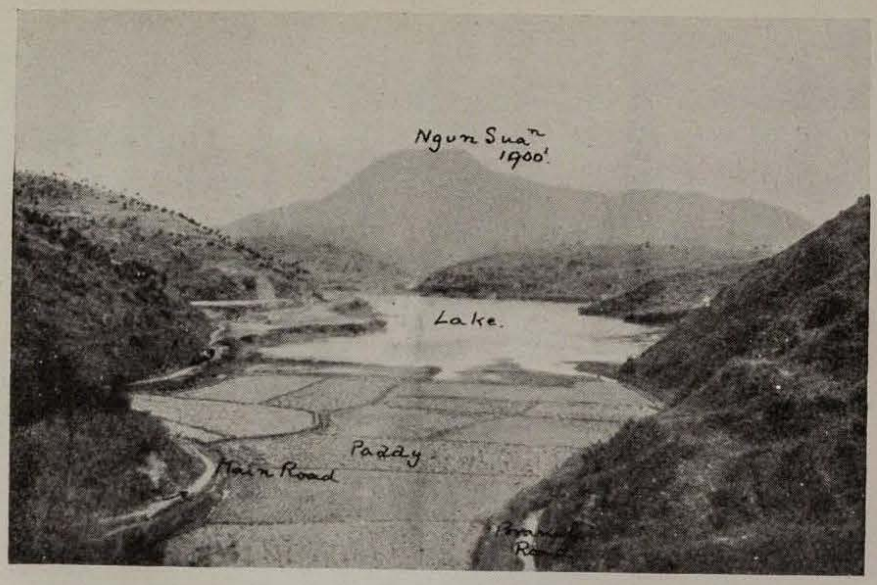
41·2 A declivity of 1 in 10 on either side leads to a stone bridge over another small affluent of the Kweitam River. Total length, 93 ft.; width, 6 ft.; 5 spans of 15 ft. Depth of stream 2 ft. at low water. Steep gravel banks 20 ft. high. The far bank commands the near. Here hills 100 ft. high start again, and the intervening land is cultivated. Road partly paved, partly gravel.

43·1 Stone bridge over *Kweitam River*. Total length 310 ft.; width 8 ft. Two 15-ft. and twenty 12-ft. spans. 3 ft. of water in dry season. Far bank 16 ft., near 12 ft. high. Steep and shingly.

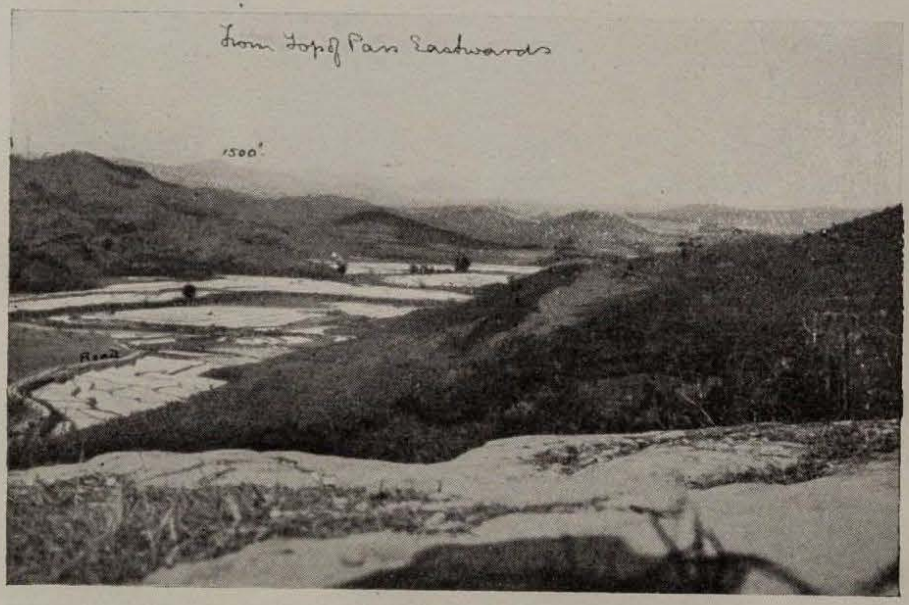
KWEITAM, P., market town (500 houses). See *Gazetteer* and Route 5, mile 29.

44·7 Branch road to **Lui-yung** on l.

45·4 Branch road joins from left rear. Main road 3 to 4 ft. wide, of sand and gravel, runs over plain. The general trend of the plain is westerly. Hills 1,200 ft. high to SE.



VIEW, ROUTE 32



VIEW FROM TOP OF PASS
Route 31, mile 36·1

miles

45·7 Stone bridge 55 ft. long, 4 ft. wide, one 15-ft. and two 12-ft. spans, over stream carrying 3 ft. of water at dry season. Banks are steep and 12 ft. high.

47·7 Branch road to l.

48·4 Road widens to 4 ft., composed of sand and gravel, and runs through dry cultivated plain. At mile 51·9 a cutting 25 ft. deep carries road through a low range of hills 200 ft. high.

49·3 **Sai-ma^{n}** (100 houses). Just past this village two branch roads go off to l.

50·1 From here for 4½ miles water is very scarce except at streams. Cart tracks appear at this point. These carts are chiefly used between farmsteads.

50·8 Short down grade of 1 in 100.

51·3 Stone bridge 45 ft. long, 4 ft. wide ; one 15 ft. and two 12 ft. spans. Depth of water 3 ft. in dry season. Banks low.

51·5 **Seen-kiêng** (40 houses). Fir trees 4 in. in diameter on l. Sandy plain on r.

51·9 Stone bridge 21 ft. long, 2½ ft. wide, one 12-ft. span. 2 ft. of water in dry weather. Banks 6 ft. above bed level. Camping-ground suitable for 2 brigades on l.

54·2 Bridge originally stone and 70 ft. long. In May 1912 this was washed away. In January 1913 (low water) there was a temporary bridge of two 15-ft. wood spans over 2 ft. of water. Banks 8 ft. high.

54·9 A direct road from **Hweilaihsien** joins on l.

55·3 **Lai-ao,** village. Road 8 to 10 ft. wide over plain, 3 ft. wide in cultivation. Chiefly sand and gravel. Rise on to plain 1 in 70. Water on plain from wells.

55·6 Road on r. to **Pi-kao,** about 4½ miles distant to N.

56·2 Road meets affluent of the *Lukfung River* coming from Pi-kao on r. and runs along its l. bank. From here the plain is left and cultivation met with.

56·7 Road leaves river.

58·2 **E-p'ou** (40 houses).

miles

58·7 Bridge over Pi-kao River. Total length originally 320 ft. Was washed away in May 1912. Now replaced (January 1913) by two 15-ft. spans, 1 ft. wide. Depth of stream at low water, 1 ft. Current r. to l. Banks 6 ft. high.

59·3 **P'ou-bui,** a double village consisting of a small market town (300 houses) and a family village (60 to 80 houses). The road into P'ou-bui is 3 to 4 ft. wide and composed of sand and gravel. It winds among cultivation. Water is obtained from a lake which separates the two villages. There is a wood covering about an acre which would give ample supplies of fuel.

59·8 **Chie^{n}-liao** on r., **Eng-t'ao-ka** on l., villages aggregating 100 houses. The road is 3 ft. wide and paved for ¼ mile out of P'ou-bui, after which it is of sand and gravel, still 3 ft. wide. General direction, W.

60·1 Bridge over a small creek. Length, 42 ft. ; width, 6 ft. ; two 18-ft. spans. Depth under the bridge at low water, 4 ft. Banks only 2 ft. high.

80 yds. beyond the bridge is a blockhouse 50 ft. up the side of a hill on r. It is round in shape, some 16 ft. high and 20 ft. in diameter, and commands a good view over the surrounding country.

62·1 Stone bridge over another tributary of the Lukfung River. Total breadth of river, 327 ft. ; length of bridge, 170 ft. ; width, 6 ft. ; 11 spans of 15 ft. Deepest water 7 ft. in dry season. On the W. side of this bridge is a stone causeway raised 4 ft. above the surrounding country, 5 ft. wide and 280 yds. long. The river banks are 3 ft. high and muddy. The river is obviously liable to flood up this causeway. From here the road continues on the lower slopes of low hills, is 4 to 5 ft. wide, and chiefly of gravel.

62·5 A second blockhouse similar to the one at mile 60·1. The road between is level.

miles	
62·6	Rise and fall of 1 in 70 over a small pass some 100 ft. high.
63·6	Road narrows to 2 ft. while crossing a plain.
65·2	Stone bridge over a creek leading S. into a lagoon about ¾ mile distant. Total length, 63 ft. ; width, 10 ft. Three 15-ft. spans. Depth of stream 10 ft. at low water. Banks low.
66·8	A third blockhouse.
67·3	Suburbs of Lukfung.
67·7	**LUKFUNG,** P. (see *Gazetteer*).

ROUTE 32

HOIFUNG TO HOPO

Land Route (51·1 miles)

Authorities : Lieut. R. M. Crosse and Lieut. F. L. Brown, January 1913 ; War Office Sketch Map, No. 440 (1913) ; War Office Provisional Map of the Province of Kuang-tung, 1911 ; Chinese Map of Kwangtung, 1879.

General direction, NE. This route is the one in general use from Hoifung to Wukingfu. It would be a better route than No. 31 for moving a small column from Kityang westwards, as water transport is available to Hopo at nearly all times, and up to a point 6 miles above Hopo in summer. There is also a water route in summer from Hotin (mile 32·9) to Lukfung on which rafts could be used. This leaves only the watershed, 10 miles in breath, to be traversed. The country is not difficult, though there are steep gradients to be traversed, and high hills in the vicinity. Camping-grounds are not very easily found, but in villages of 100 houses billeting can be resorted to. To reach Hoifung from Seen-ts'en (mile 20·9), the river would be left, and 10 bridges would have to be crossed, though none of any great difficulty except at mile 8·3, where a river 100 ft. wide has to be crossed. Here is a ferry for 36 men, however.

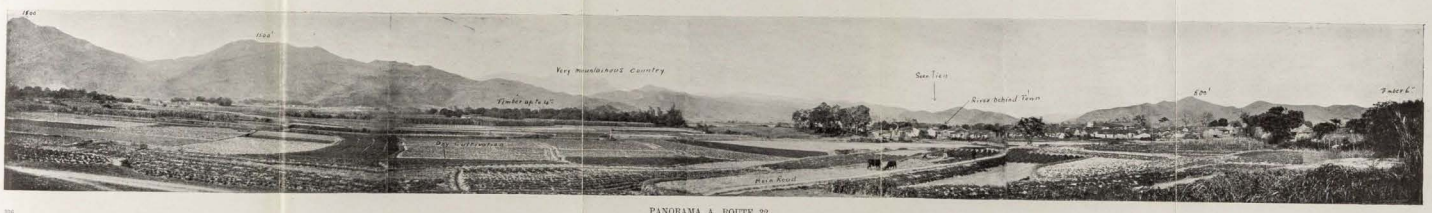
Wood is not very plentiful, but 6-inch timber exists at Seen-ts'en, and smaller timber near the hills. Bamboo is obtainable along the rivers.

For description of road from Lukfung to Hoifung see Route 8.

Place-names in Hakka are marked (H.), in Hoklo (Hkl); the remainder, apart from Post Office names, are in Cantonese dialect.

miles	
0	**HOIFUNG,** P. T. Route leaves by the North Gate and moves NNE. The road is 4 ft. wide, of sand and gravel, with short paved stretches.
0·8	3-span stone bridge, 30 ft. long, 2½ ft. wide. Depth of stream 1 ft. in dry season. Banks low. Current l. to r. Paving of road ceases here.
1·7	Road narrows to 3 ft. On l. is the mountain range which is crossed by the Hoifung–Samtohü road (Route 16). On r. is rolling plain until the hills lying N. of the Lukfung–Hoifung road are reached.
2·9	Stone bridge, 20 ft. long ; 3 spans of 6 ft. General width of stream, 40 ft. 1 ft. of water in dry season.
3·6	2-span stone bridge 20 ft. long, 4 ft. wide. Depth of water 2 ft. in dry season. Banks level and 3 ft. high.
4·5	Down grade of 1 in 40, paved for ¼ mile.
5·4	5-span stone bridge 75 ft. long, 7 ft. wide. Width of river 100 ft. Depth of water 2 ft. in dry season. The main river is about ¼ mile distant on r.
6·8	Stone bridge of two 12-ft. spans, 3½ ft. wide. Width of stream, 35 ft. ; depth, 1 ft. in dry season. Banks 15 ft. high but easy. From here to Kungping the road is a cobbled causeway.
7·2	**Kungping,** P. (Hkl. : Kung-p'een) (500 houses). Moderate market supplies. Drinking-water is available, but should be boiled. Camping within a mile or so of Kungping is not recommended.
7·5	Branch road or path on r.


800'
Timber 6"



PANORAMA A, ROUTE 32

miles

8 **Lao-hi** (H.), market village of 150 houses. Up to this point the road is 2 ft. wide, composed of sand and gravel. There is vegetable cultivation on either side of the road.

8·3 Bridge over *Kiong Shui* (H.). General width of river 110 ft. At low water the river is crossed by 6 wooden spans of 8 ft. on trestles 1½ ft. wide. Probable rise of river 5 ft. There is also a ferry which would carry 36 men at a time in 3 boats. In the vicinity is a camping-ground, 500 by 200 yds.

9·5 Branch road on r. to **Taan,** P. (Hkl. : Toa-an).

10·7 **Seen-t'ong-ui** (Hkl.) (60 houses) on l. Low hills about 150 ft. high 1 mile to r.

12·2 Stone bridge 37 ft. long, 2 ft. wide. Two 18 ft. spans. Depth of stream 4½ ft. in dry season. Current r. to l. Banks low and level. A large camping-ground on r., with plenty of water available.

13·5 **Ngit-tiung-hi** (Hkl.), marked Yi-chung on War Office Provisional Map, market village of 100 houses. From here the road, 2 ft. wide, rises 1 in 100 on to moorland.

13·6 **E-lao** (Hkl.), village. Branch road on l. to **Saiking,** P. and **Hui^{n}-lung** (Hkl.) (see mile 18·2).

14·7 Up grade 1 in 70.

15 Boundary between Hoifung and Lukfung districts, among hills 50 to 100 ft. high. **Nam-hang** (Hkl.), village.

15·2 Bridge over affluent of Lukfung River ; total length, 96 ft. ; width, only 1 ft. ; six 15-ft. wooden spans. Width of stream, 55 yds. ; depth at low water, 2 ft. 2 ft. ford at low water. Current l. to r. Right bank gentle, l. bank vertical, 20 ft. high. Liable to flood on r. bank. 8 in. timber available for cutting.

15·7 Road composed of sand, 2 ft. wide. Ascent of 1 in 60. Branch road on r. to **Sze-heung-ha.** A low

miles	
	hill pass 50 ft. above road level. Small hills in vicinity.
15·8	Down grade 1 in 60.
16	Small stream on r., another branch of the affluent crossed at mile 15·2.
16·3	Stone bridge 40 ft. long, 4 ft. wide ; two 15-ft. spans. Depth of stream 1 ft. in low water season. Banks easy. Left bank higher than right.
16·8	Village of 60 houses. Road of sand, 2 to 3 ft. wide. Sharp rise of 1 in 15 for 50 yds. Camping-ground for 1 brigade but no water. Low hills.
17·3	Branch road on r. to **Ho-hao,** about 6 miles distant. Route crosses stream.
17·9	Branch road comes in from l. rear.
18·2	**Hui^{n}-lung** (50 houses).
18·9	Stone bridge 25 ft. long, 3 ft. wide ; two 12 ft. spans. Depth of stream in low water season, 3 ft. Banks low.
19·6	Camp for 1 brigade on r. Road paved or sand and gravel, 2 to 3 ft. wide. Rise of 1 in 10 for 100 yds., then down 1 in 15, continuing at 1 in 20 for 1 mile.
20·8	**Wang-lao** (Hkl.) (30 houses).
20·9	Down grade 1 in 7. Road 2 to 4 ft. wide to bridge. River (affluent of Lukfung River) 55 yds. wide, 2 ft. deep at lower water. Liable to flood to 80 yds. Bridge of fifteen 6-ft. wooden spans. Left bank 20 ft. high and vertical. Wood with 8 in. timber on r. bank. Ferry.
21	**Seen-ts'en** (Hkl.), market village. Route turns r. and goes E.
22·5	Width of road 1 to 2 ft. ; sand and part steps. Rise of 70 ft. at slope of 1 in 7. Road on r. to **Ngong-t'ong** (H.) and **Ho-hao.**
22·8	Road drops to general level at a slope of 1 in 10, and widens to 3 to 4 ft. Part sand and part steps. Water available.

miles

23·7 Gentle up and down grades gradually dropping to level at mile 24·9.

24·5 **San-fung** (H., Hkl.) (30 houses). General level of road 200 ft. above Seen-ts'en. Road surface hard sand. Route turns l. and goes NNE.

25·1 Double plank bridge 1¼ ft. wide over *Lukfung River*. Two channels, each 1 ft. deep in dry weather, crossed by four and nine 15 ft. spans respectively. Banks steep, 15 ft. high and wooded, 6 in. timber. Current about 2 knots at low water. Probable rise 4 to 5 ft. There is a ferry at high water. Total width of river 120 yds. Camping-ground for 1 brigade ½ mile to r. **Le-kung-p'ing** (Hkl.) 40 houses.

25·6 Route from here to **Hotin** practically follows the l. bank of the river. Paved road 3 ft. wide. Branch road over hills on l.

26·4 **K'ai-ssŭ-hang** (H.) or **K'ei-chi-k'en** (Hkl.), village of 30 houses. Grade of 1 in 7 up and down for 100 yds.

27·7 **Lim-hang-tzŭ** (H.) or **Leem-hang-chi** (Hkl.) hamlet. Road 2 to 3 ft. wide, still paved. Two short grades of 1 in 7 up and down while cutting off bends of the river. Branch road on l.

28·2 Route crosses small affluent at its mouth. Grade of 1 in 10. **Ngong-t'iu** (H.) (30 houses).

29·6 **K'ei-tung** (Hkl.) (30 houses). Short grade 1 in 10.

31 **Ngong-fu** (H.) (50 houses). Road part paved, part sand.

31·4 Branch road on r. to **Wongtong E.** (see mile 39).

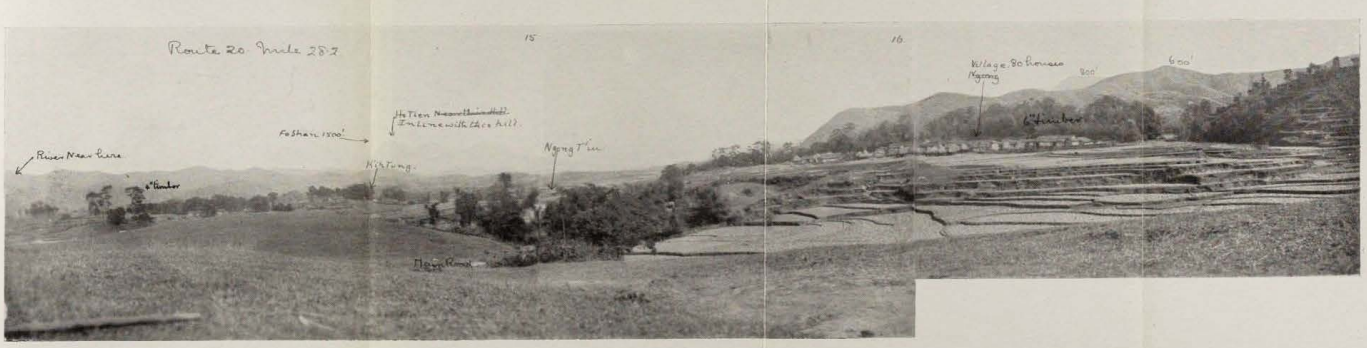
31·5 Stone bridge over creek, 56 ft. long, 6 ft. wide; three 15-ft. spans. 1 ft. of water in dry season. Banks 12 ft. high and steep.

31·9 Road 3 ft. wide, gravel surface. Gradient of 1 in 20 up and down.

32·5 3-span stone bridge over creek, 36 ft. long; depth of stream at low water season, 1 ft. Banks 10 ft. high and level.

miles	
32·9	**HOTIN,** P. (Hkl. : Ho-ts'een), market town (800 houses). Route turns E., away from Lukfung River.
33	Bridge consisting of one stone arch, 33 ft. span, 9 ft. wide. Depth of stream 9 ft. at low water. Current l. to r. Banks easy.
33·3	Branch road on r. to **Tunghang,** about 4 miles distant.
33·6	Branch road on l. to **Shang-p'iang** (Hkl.), about 3 miles distant.
34·7	Branch road on r. to **P'êk-shu** (H.) Route turns NE.
35·2	Bridge, one span of 15 ft., one span of 12 ft., 4 ft. wide. Depth of stream at low water, 1 ft. Current l. to r. Banks 6 ft. high and easy. Total width of stream, 33 ft.
35·5	Branch road on l. to **Yeung-king.**
35·7	Rice and sugar cultivation among low hills. Grade of 1 in 100. Road widens to 3 or 4 ft., surface sandy.
36·1	**Yiu-fo-tiam** (H.) (50 houses). General direction E.
36·5	**Ngiu-p'ei-lek** (H.) (15 houses). Short grade of 1 in 30 up and down. Route turns NE.
36·9	Short rise of 1 in 30.
37·1	Level again. Village.
38	**Ha-wo** (H.) (15 houses). Road narrows to 3 ft.
38·5	Route meets *Nam K'ai* (southern branch of Kityang River). Up grade 1 in 10 to 100 ft. Down grade 1 in 20.
39	Plank bridge, 18 spans of 10 ft. ; 1 ft. wide. Total width of river, 220 ft. ; depth in dry season, 1 ft. Current r. to l. Banks 8 ft. high. Probable rise of river in wet season, 5 ft.
	Wongtong E., P. (150 houses). No ferry visible. High hills rising to 1,500 ft. on either side. Camping-ground near river on low foothills.
39·9	1 in 10 up grade and 1 in 20 down grade.
40·2	Road again strikes river, which has made a sharp





PANORAMA B, ROUTE 32

miles

bend ½ mile W. of the town. Hills on r. 150 ft., on l. 200 ft. High hills of 1,600 ft. about 3 miles distant on r.

40·3 Bridge consisting of 7–10 ft. planks 1 ft. wide. Width of river 155 yds. ; depth in dry season 1 ft. Banks about 10 ft. high, l. bank the higher. Probable rise in rains 5 to 6 ft. No ferry visible.

40·8 **Ku-chuk-p'ou** (100 houses) on l. bank of river. Road 2 ft. wide, sand surface and level. Total width of river 177 yds. Plank bridge 1½ ft. wide over low water streams ; eight 12 ft. spans and ten 10 ft. spans. Depth of river at low water season, 1 ft. Right bank 15 ft. high, l. bank 8 ft. Ferry at high water season, carrying 36 men at one time. Banks well wooded ; 6 in. timber and 4 in. bamboo. Probable rise 3 to 5 ft. Route follows r. bank. General direction, NNE.

41·2 **Tong-ee-ts'oi** (H.) (100 houses).

42·4 **T'ien-sim** (H.) (60 houses) on r. Route leaves river.

43·2 Foot of hill pass. Rapids on river. Impassable to any craft in low water season. Hills rise 800 ft. on either side of river, which flows through gorge. Probable rise of 15 ft. in rains.

43·7 Road of rock and gravel, 2 ft. wide, very tortuous. Ascent of 1 in 8.

44·1 Top of pass. Road becomes more or less level. Lake about 3 ft. deep.

44·3 Down grade 1 in 10.

44·5 Branch roads to l. : (1) to **Ying-u-shing** ; (2) to **Sin-p'ing.**

44·7 Bottom of pass.

45·1 **Ha-p'ou** (60 houses) on r. bank of river, which route now follows. General direction E. Road is of sand 2 to 3 ft. wide.

45·8 Bridge over tributary to main river. Total length, 66 ft. Five 12 ft. spans ; planks 1 ft. wide on stone

miles	
	piers. Depth of stream at low water season, 1 ft. Banks shelving.
46·3	Bridge over tributary. Total length, 63 ft. Five 12 ft. plank spans, 1 ft. wide. Depth 6 in. at low water season. Banks low.
47·6	**Kiun-t'ong-kok** (Hkl.) (40 houses). *Ngun Suan* (Hkl.), 900 ft. high, 1 mile to r. Camping-ground in vicinity. General direction, NE.
49	Branch road on r. to **Ho-p'i-t'ong.**
50	Plank bridge 1 ft. wide. 42 spans of 12 ft., 3 ft. clear of water. Total width of river, 170 yds. Average depth, 1 ft. Channels of 2 ft. at low-water season. Probable rise, 6 to 8 ft. Ferry accommodation for 150 men at one time. Bridge is removed in summer.
51·1	**HOPO,** P., market town (500 houses), at the junction of a tributary on l. Native sugar-crushing mill. Head of navigation on the Nam K'ai (see Route 33, mile 27·4).

ROUTE 33

MIENFU TO HOPO

Water Route (27·4 miles)

Authorities: Lieut. R. M. Crosse and Lieut. F. L. Brown, January 1913; War Office Sketch Map, No. 440 (1913); Chinese Map of Kwangtung, 1879.

General direction, W. by S. with S. bend. This is part of the usual water route from Kityang to Wukingfu, Hopo, and Hotin. The river averages 100 yds. in width, but is shallow in low water season. The average depth at that time is 2 ft. The general rise and fall is about 7 ft., but 10 ft. may be considered not abnormal. It is liable to flood the country, especially just below Hopo. The traffic on the river is fair. During the journey Mienfu to Hopo (11 hrs.)

some 50 boats were seen, being towed or sailing. There is an afternoon breeze up river from about 2 p.m. to 4 p.m. in winter, which is of great assistance. The current in the river at low-water season (when the route was traversed) is about 1 mile per hour. There are no rapids worth consideration and very few rock dangers. The bottom is chiefly sand. For description of boats see p. 70.

The country is not very suitable for camping, as the hills are generally ¼ to ½ mile distant from the river. It is not known what water exists on the higher hills, but they are covered with thick undergrowth which would hinder pitching camps.

From mile 24, sugar is largely grown.

Place-names in Hakka are marked (H.), in Hoklo (Hkl.); the remainder, apart from Post Office names, are in Cantonese dialect.

miles	
0	**MIENFU,** P. (Hkl. : Mi^{n}-ou), market town, partly walled, of 200 houses. From here a rowing ferry, accommodating some 30 men, runs to Kityang. The ferry starts at 9 p.m. and arrives at 2 a.m. Width of channel, 80 yds. General depth 3 ft. Least depth 2 ft. Surrounding country cultivated plain. Transport available for about 120 to 150 men, besides ferry.
3	**Êm-kia^{n}** (Hkl.) (50 houses) on r. General direction, SSW.
4	Route turns r.
5	**Ts'ing-lao-êm** (Hkl.) (40 houses) on r. Road turns l. Width of channel, 70 yds.; general depth, 2 ft. Banks 10 ft. high and steep.
5·9	**K'ih-nam** (Hkl.) (40 houses) on l.
6·3	Island. Width of channel, 50 yds. General depth, 2 ft. Banks easy.
9	**Liwu,** P. (H. : Li-fu), market village of 150 houses at the mouth of a creek on l. River widens to 120 yds., but channel only 150 ft. General depth, 2½ ft. Least depth, 1 ft. Camping-ground for 2 battalions on r.

miles

Landing easy. Plain on l. Low hills, 100 ft. high, and large bamboo groves on r. General direction, WNW.

9·5 **Kit-lêm-t'am** (Hkl.) (60 houses) on l. Small rapid (only at low water). Hills 100 ft. high on either bank.

10·3 **U-shek** (40 houses) on l. Country surrounding becomes plain again.

13·3 **Pak-shek** (Hkl. : Pak-chiu^{k}) (40 houses) on l. Route turns N.

14·1 Width of channel, 160 ft. ; general depth, 2½ ft., least depth, 1½ ft. Plain on r. low hills, 100 ft. high on l.

16 Route turns l. Affluent on r. **Toa-hng** (Hkl.) (H. : **Ta-yuen**), village on l. Hills 200 ft. high 1 mile away on r. ; plain on l.

17·3 **Toa-liung-p'u** (Hkl.) (H. : **Tai-liang-fu**), village on l. General direction, W. Width of river, 80 yds. ; width of channel, 70 ft. General depth, 2 ft., least depth, 8 in. 'Removable plank' bridge on light wood piles. 10-ft. span ; height of clear span, 3 ft. River fordable at low water, depth 2 ft. Banks easy, 6 to 8 ft. Surrounding country hilly, 200 to 300 ft.

18·1 'Removable plank' bridge. 10-ft. span ; height of clear span, 2½ ft. River fordable at low water, 1½ ft. Probable rise and fall, 9 ft. From here on, the river winds considerably.

18·8 **Ü-yang-t'iu** (H.), village on r. ; **Chie^{n}-bui** (Hkl.) (50 houses) on l. 'Removable plank' bridge. 12-ft. span ; height of clear span, 3 ft. River fordable at low water, 1½ ft. Probable rise and fall, 8 ft. Just after the bridge is an island 100 yds. long. Breadth of channel passing the island, 240 ft. General depth, 2 ft., least depth, 6 in. Banks easy, 6 ft. high. Country on r. flat generally, a few low hills. Hills rising to 600 ft. on l.

19·9 **Ong-nai-ut** (Hkl.), village on r. 'Removable plank' bridge. Span, 12 ft. ; height of clear span, 3 ft.

miles

River fordable at low water, 1½ ft. Probable rise and fall, 9 ft.

20·5 River 70 yds. wide, channel 170 ft. General depth, 2 ft., least depth, 6 in. Bank on l. easy, on r. steep, 7 ft. 150 to 800 ft. hills on l., 600 ft. hills on r. Possible camping-ground for 2 battalions.

22·1 **Lui-kung-hiung** (Hkl.) (50 houses) on l. 'Removable plank' bridge. Span 12 ft.; height of clear span, 4 ft. General depth of water, 2 ft. Probable rise and fall, 5 ft.

22·3 Tributary from **Shak-tu** (Hkl.) on l.

22·4 **Yen-p'ou** (Hkl.) (80 houses) on l. Exports charcoal.

22·8 Island ¾ mile long. Route goes to l. Channel 80 ft. wide; depth 3 to 4 ft., least depth, 1½ ft.

23·4 Affluent on r.

23·9 **Hêm-p'a-sheuk** (Hkl.) (40 houses) on l. 300-ft. hills on l.; 150-ft. hills, ¼ mile distant, on r. Transport available: 8 boats, each holding 12 men.

24·6 **Liung-chih** (Hkl.) (40 houses) on l.; **Ts'een-tsen** (Hkl.) (30 houses) on r. 'Removable plank' bridge. Span, 12 ft.; height of clear span, 4 ft. Width of channel, 160 ft.; depth, 1½ ft., least depth, 6 in. Probable rise and fall, 6 ft. Banks easy, 7 ft. 5 boats holding 12 men each available.

25·3 Camping-ground 200 by 600 yds. on r.

25·6 **Kiun-ts'en** (Hkl.) (100 houses) on l. Width of river, 150 yds. Width of channel, 100 ft. General depth, 2 ft., least depth, 6 in. Banks easy. Transport for 120 men. High hills (*Ngun-sua*^{n}) up to 900 ft. on l.; 200-ft. hills on r.

27·4 **HOPO,** P., market town on r. with three 'removable plank' bridges. Span, 10 ft.; height of clear span, 3 ft. Probable rise and fall, 8 ft. Bank on l. 12 ft. high; on r., 8 ft. Channel, 100 ft. wide. Total width of river, 170 yds. Transport for 500 men (see Route 32, mile 51·1).

CENTRAL KWANGTUNG AND CANTON DELTA

ROUTE 34

CANTON (SHAMEEN) TO WAICHOW

WATER ROUTE (95 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 15; War Office Sketch Map nos. 379 (1909); 422, sheets 1 and 2 (1911); Admiralty Charts, 1739; 1742, sheet 4; 3588; Sketch Map of Canton–Kowloon Railway: Key Plan, Canton to Sam Chun.

General direction E. This is the direct route from Canton up the East River, a continuation of which as far as Lungchün is given in Route 22.

The route starts down the Pearl River by the Whampoa Channel. At mile 15½, where the river turns SE., the route continues east through the Lukpo Canal into the main branch of the East River delta. This passage is only suitable for small craft. Larger vessels must go round to the south of Davis Island and enter the East River by Escape Creek.

The East River below Sheklung varies in breadth from 800 to 400 yds., and is somewhat shallow, having many islands and sandbanks, but with few rocks. The surrounding country is for the most part flat, fertile, and populous, with a few low hills on the north bank. Several small affluents enter the river on this side, and there are many towns and large villages along the banks. On the south are large paddy fields protected by embankments about 6 ft. high, and extensive bamboo and banana plantations close to the river. This delta country is dotted with small villages and intersected by innumerable creeks.

At mile 32¾ the Shektan River comes in from Tsengshing-hsien and Lungmoonyün, and just before reaching Sheklung the Canton–Kowloon Railway, which has followed the north bank at an average distance of 2 to 3 miles, turns south and crosses the river by a bridge 800 ft. long. Sheklung is situated at the apex of the East River delta. Here the main branch of the Lungmoonyün River comes in from the NE., while the Tungkun branch of the East River flows off to the SW.

Above Sheklung the river becomes shallower and is not navigable by large sea-going junks. Its width varies from 200 to 400 yds. The country remains flat up to mile 66½; after that point low hills occur on both sides until Waichow is reached.

The route has not been traversed in detail, and distances are approximate only.

miles	
0	**CANTON,** P. T. RS. The route starts from Sha-meen down the *Pearl River*, passing the southern water front of Canton City. General direction E.
2	Branch of Canton–Kowloon Ry. meets river on l. (Tai-sha-t'au station). Route passes S. of *Kuper Island* (¾ mile long) and *Napier Island* (1½ mile long, with fort at its eastern extremity). Rice cultivation on r.
4	Creek on r., with inclined pagoda ½ mile from its mouth. Base 30 ft., summit 205 ft. above high water.
4½	Fort on r. Several creeks on l. leading to **In-t'ong,** 2½ miles distant. *New Island* opposite.
5	*Whampoa Barrier*, and mouth of *Fiddlers Creek* on r.
5½	Joss-house and pagoda on l. *Whampoa Island* with paddy fields on r.
7¾	*Pa-chau Pagoda* about 500 yds. distant on r. Base 86 ft., summit 258 ft. above high water.
8	*Pa-chau-kok* or small Whampoa Pagoda on r.
9	Junk Island (2 miles long). Route goes S. of it. General direction SE.

miles	
11	**Whampoa,** P. T., on northern shore of *Danes Island* on r. Route turns l. and goes E.
11½	Telegraph cable crosses river.
12¼	*Cambridge Barrier. Flat Islands* on r.
12¾	Creek on l. leading to **Wuchung,** P. RS., about 1 mile distant.
14	*First Bar Island.* Navigable channel for foreign vessels lies to the S. of this island. Route continues close to N. bank. *Fu-sui Hill* and *Polo temple* about a mile inland on l.
15½	Route enters *Lukpo Canal* (also called Junk Passage), 30 to 40 yds. wide, which goes off to l., N. of *Davis Island*, and cuts off the sharp angle made by the junction of the East and Pearl Rivers, thus shortening the journey eastwards by several miles. The Lukpo Canal is 2 ft. deep at low water, and makes some sharp turns. There are banana plantations along its banks. The paddy fields on both sides are covered at high water, rendering the channel difficult of recognition, but it is much frequented by steam launches.
16	Creek on l. leading to **Polo,** P., about ½ mile distant.
17	Creeks on l. and r. Joss-house on l.
19	**Lukpo,** P. on l.
19½	Route enters East River (northernmost branch of delta). Width of stream below Sheklung, 800 to 400 yds. Normally, the river has a very slight current at low level, is almost stagnant at high water, and very rarely has an upstream flow. Spring rains commence in March, heavy rains and floods in May and September. Main river generally rises 1 ft. a day, but at times may rise as much as 5 ft. a day. Maximum speed of current during flood, 6 miles an hour.
19¾	Creek on l. leading to **Namkong,** P. RS., about 1½ mile distant. (The Ry. station is 1½ mile

miles

further to the N.) Round black hill slopes down to river and projects in a rocky point. Here stands a square pagoda.

20¼ Creek on l. leading to **Sha-ts'ün,** about 2 miles distant, and also connected with Namkong creek. Shore on r. covers at high water.

21 Mouth of *Tseki Creek,* joining Pearl River ½ mile below Escape Creek.

21¼ Another creek on l. leading to Sha-ts'ün.

22¼ **Mai-ch'eung,** village on l.

24 **Suntong,** P. T. RS., town of some 5,000 inhabitants, on l. The Ry. Station is 1½ mile N. of the town. Just above Suntong the telegraph line from Canton to Kowloon crosses the river by submarine cable.

25½ Brick kilns and village of **Lai-chu** on l. Creek on r. running SSW. to the Pearl River, and connected by another creek with **Chungtong,** P., about a mile from river bank.

26¼ Creek on l. leading to **Tongmihü,** P. RS. (Tong-mei).

27 **Taitun,** P., village with pagoda on l. Opposite is a cultivated island about 1 mile long.

27½ Creek on l. with depth of 4 ft., but tortuous, leading NE. to **Sintsün,** P. RS. A small branch also goes off to **Ngayiu,** P. (Ry. Halt).

27¾ Series of islands. Bar with depth of 2 ft. at low water. Tidal rise here is 3 to 4 ft. Above the bar only the ebb stream is experienced.

31½ Creek on l. to Sintsün, about 1½ mile to NNW. Another creek goes NNE. to **Shek-ha** (Ry. Halt). Bar of 4 ft. in mid-channel. Route turns ESE.

32½ **Kun-hoi,** village on l.

33 *Shektan River,* not navigable for large boats, comes in on l. from NE. (see Route 36).

Wong-chong creek on r.

33½ **Ka-po,** village ¼ mile from river on l.

34 Group of 4 islands.

miles

35¼ Two creeks and village on l. There is said to be a sampan channel joining the East River to the Shektan River. Small ruin opposite on r.

36 Island about 1¼ mile long. Route goes to N. of it.

36¾ Village on l. at mouth of small creek leading ENE. to **Shek-lik-kau** (Ry. Halt).

37¼ Small island. Route passes S. of it.

38¼ Muddy tidal creek on l., leading to Shek-lik-kao and **Tong-pin,** crossed by the railway about 1½ mile from its mouth. Single tree nearly opposite on r.

38¾ Island about ¾ mile long on r.

39¼ Village or **Lang-tai** and likin station at mouth of creek on l.

40 American Mission Station on r. Lat. 23° 7′ 10·5″ N.; long. 113° 49′ 22·5″ E.

40¼ Canton-Kowloon Ry. crosses river on a bridge of 3 spans of 224 ft. each, and 2 spans of 60 ft. each. Two piers in the river itself.

40¾ **Sheklung, P.** T. RS. on r. (see *Gazetteer*). The river is not navigable above Sheklung by large sea-going junks with fixed masts, and the Railway Bridge now prevents them from reaching the town.

41¾ *Wong-ka-san River* (connected by a creek with the Tsêng River) comes in on l. The straggling town of **Shekwan E.,** P., lies opposite to Sheklung at its mouth. From here one crosses a nearly level plain in a NNE. direction to reach the *Lo-fan Mts.*, about 12 miles distant. River makes a sharp bend to r. and narrows considerably.

42¾ Tungkun branch of East River goes off on r. in a south-easterly direction, passing the district city of **Tungkun,** P. T., about 12 miles distant, and flows into the Pearl River about 18 miles further on. Between Sheklung and Tungkun the stream is shallow and can only be navigated by junks during the summer freshets.

miles	
	Route turns l. and proceeds along S. bank. General direction E. The river is wider again, but the channel is much encumbered with sandbanks. The country is flat and cultivated up to **T'ung-mun** (mile 68¼). Above that point there are low hills on both sides.
44¾	Rest House at the foot of a remarkable boulder hill on r.
45¼	Rest House on r.
45½	Clump of bamboos on r. Route crosses to N. bank of river. Cultivated island, 1¾ mile long, separated from S. bank by a narrow channel.
46½	Rest House on l.
48	Small pagoda ¾ mile inland on l.
48½	**Lok-lan,** village with conspicuous house ½ mile inland on l.
49½	Route turns l. Bamboos on r.
50½	Creek on l.
51½	**Ha-nam,** village on l.
52	Creek on l. Route turns r.
54	Island 2 miles long on r.
55½	White Rest House on l.
56¼	Affluent on r. coming from **Kanlanhü** and **Tong-towha,** the latter on the Canton–Kowloon Ry.
56½	Route turns l. Joss-house on r.
58	Village with Mission Chapel near mouth of small creek on r. Route turns l.
59	**Wing-wo,** village with Mission House on l. Small red cliff just beyond.
60	Two creeks on l. Route turns r. Low hills about a mile from bank on r.
62	**Lui-chin,** village on l.
62½	Creek on r.
63½	Route turns r.
64¼	Creek and Rest House on r.
65	**T'it-kong,** village on r.

miles	
65¼	Temple on r. Bank 15 ft. high. Shed and Rest House on l.
65¾	Island 1½ mile long, with navigable channel on either side. Bar with 4 ft. of water at entrance to southern channel, which is narrower than the northern. Route turns l. and goes N. of island.
68¼	**T'ung-mun,** village on r. at the mouth of a creek leading to the *T'ung Wu* about 5 miles to the S., a lake extending about 6 miles E. and W. by 3 miles N. and S. in summer (see Route 35 A, mile 18½). Route turns l.
69¾	Joss-house with pine trees on r. Hills on both banks.
71¼	Route turns r.
71¾	Pine tree hill on r.
72	Two Guard Houses ¾ mile apart on r.
73	**So-ts'ün,** village on l. Route close to bank on r.
73½	Route turns l. and crosses river. Island 1½ mile long on l.
76	Small island with Joss-house opposite on r. Low hills along the bank on l.
78	Route crosses to r.
78½	Route turns l. Hills on both banks.
79½	Route turns r.
79¾	Route passes through a narrow channel between a small island and bank on r. Bamboos on l.
80	Conspicuous single tree on r.
81¼	Lat. 23° 8′ 57″ N.; long. 114° 14′ 30″ E.
81½	Low grassy island ½ mile long near bank on l. High hill 1 mile from r
82½	Route crosses to l.
83¼	**POKLO,** P., walled district city of about 20,000 inhabitants on l. (see *Gazetteer*).
83¾	Joss-house on l.
84	Mission House on l.
84¾	Guard House on l.

miles	
86	Island on r. Red hills on l.
87½	Joss-house on l. River narrows.
88¼	Likin station on l. Route turns r.
88¾	River widens out again. Route goes SSW., closely following bank on r.
89	Brick kiln and small creek on r. Route makes a sharp turn to l.
90	Route turns and crosses to l. Guard House on l. Telegraph wire crosses the river here.
90¾	Small creek on l.
92	Route turns r. and goes SSE. Red cliff on r.
92½	Two small red cliffs on r. Navigable channel crosses to l.
93¼	Guard House on l. Route recrosses to r.
93½	Conspicuous white house on r.
93¾	Lat. 23° 7′ 1·6″ N.; long. 114° 23′ 35·25″ E.
94¼	Temple on r.
94½	White house on r.
94¾	Creek crossed at its mouth by a stone bridge on r.
95	**WAICHOW,** P. T., on r. (see *Gazetteer*).

ROUTE 35

WAICHOW TO T'O-T'ONG

Authorities: Sketch Map, Tu Tung to Waichow (H.M.'s Intelligence Dept.); War Office Provisional Map of the Province of Kuang-tung, 1911.

General direction WSW. The route is based on a theodolite traverse from Waichow to the Canton–Kowloon Railway. On the first stage, between Waichow and Aptsaipo, it passes through hilly country with comparatively few villages. The ordinary road, lying more to the north, is somewhat shorter, but leads over a pass about 500 ft. high.

Beyond Aptsaipo the route traverses a low-lying district bounded by hills on the north and south, and flooded up to 15 ft. in summer. A large lake is thus formed, known as the

T'ung Wu, the overflow from which drains northwards into the East River. Consequently there are very few permanent habitations in this part of the country. At mile 24½ a stream of some importance is crossed, which rises in the mountains north-west of Shumchün and flows into the East River 15½ miles above Sheklung. The route terminates at T'o-t'ong, a small village with a railway halt about midway between Canton and Kowloon.

At Aptsaipo an alternative route (B) goes off to the south and runs roughly parallel to Route (A) at an average distance of 2 to 2½ miles, thus avoiding the flooded area. There are several large villages on this route and three considerable streams, probably dry in winter, to be crossed within 4½ miles of Aptsaipo. It does not rejoin the northern route until T'o-t'ong is reached.

Land Route (A) (27½ miles)

miles	
0	**WAICHOW,** P. T. Route starts from S. bank of Tamshui River opposite Kwaishin. Direction SSW.
1	Route turns SW. through low hills. **Tai-tong-tau,** village ½ mile to l.
1¼	Small stream flowing l. to r.
1½	Narrow and tortuous defile about 3 miles long and 100 to 200 ft. wide. Very good level road.
2¼	Road on r. from Waichow SE. gate joins here.
3	Prominent peak 1¾ mile to l.
4½	Route emerges from defile. Surrounding country hilly.
6½	Route turns r. and goes W. by N.
7	**Chung-ke-liang,** village.
7¾	**Hok-tong-pai,** village. Low hills on r.
9¼	Stream flowing l. to r. White temple ¼ mile distant on r.
	Aptsaipo, P., large village on l. Alternative route to T'o-t'ong goes S. through the village.
9½	Route turns NW.

miles	
10¾	Fort ¾ mile distant on r. Brown fort 1 mile further back. Hamlet between the two.
11¼	Route recrosses stream previously met at mile 9¼. Current r. to l.
11¾	Route turns l. and crosses a small spur. General direction WSW. Hills ½ mile distant on r.
14½	Low hill with conspicuous pagoda (marked *Sar-pu-ta* on sketch-map) which can be seen for 8 miles in every direction. Road on r. going NW. to **Kwong-ho-hü** on East River, about 6½ miles distant. Three miles from this point it crosses a pass 280 ft. high.
18½	*T'ung Wu*, a lake on l., which in winter is not more than ½ mile long, but in summer expands to some 6 miles in length and 3 in breadth, with a depth of 15 ft. in many places.
19½	Route passes over a low hill.
20	**Siao-sam-pi-tao,** village on l. **Ta-sam-pi-tao** ½ mile further off on l.
21½	Small stream flowing l. to r.
22	Route meets main stream, which flows N. into East River (see Route 34, mile 56¼). **Kiang-pai,** village with American Mission, 1 mile to NW.
22¼	Small stream flowing l. to r.
23¼	Route passes over small elevation. River 200 yds. to r.
23½	Stream flowing l. to r.
23¾	Slight elevation.
24½	Ford across river. Current l. to r. A flood dam has been built along the l. bank to protect the land lying to the W.
24¾	*Sai Wu*, a lake about ½ mile broad on r. **Ma-hsiung,** village on l.
26¼	**Pak-yün,** village at foot of low hill. **Hsin-hsiu-kang** about a mile to r.
27½	**T'o-t'ong,** village on l. The Railway Halt (56·2 miles from Canton, 54·77 miles from Kowloon) is ¼ mile further W.

LAND ROUTE (B) (28¼ miles)

miles	
0	**WAICHOW,** P. T.
	For details to mile 9¼ see Route 35 (A).
9¼	**Aptsaipo,** P. Route goes S. through the village.
10¼	Fort ½ mile distant on l. Route turns r. and goes SW.
11¼	River from **Tung-wên,** flowing l. to r. Range of high hills on S. for the next 12 miles at an average distance of 1 to 1½ miles.
12	River flowing l. to r. **Wang-ham-tao,** village on further bank.
13	**Wang-yao-tun,** village on r. Route turns NW.
13¾	**Tung-lao,** large village on l. at foot of a small hill. Route crosses stream flowing l. to r. and turns S.
14¼	Temple on r. Route turns W.
14¾	Village on l.
15½	**Liang-lien-cheong,** village. General direction WSW.
16	**Leitsuen,** P., market village. Hill ½ mile to l
16½	Small hill on l.
18¾	Village. Route turns W.
19¼	Route meets bend of small river.
20½	**Chieh-kang,** a large village (pop. 1,300) on l.
21¾	Route crosses a low pass.
22½	Low hills on each side.
23½	Village.
24½	Low hills.
25½	Route turns NW.
25¾	Ford across river, about 1½ mile S. of ford mentioned in Route 35 (A), mile 24½.
26	Route turns W.
28¼	**T'o-t'ong.**

ROUTE 36

CANTON TO LUNGMOONYÜN

Water Route (103 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 15; War Office Sketch Map, no. 379; Sketch Map of Canton–Kowloon Railway; War Office Provisional Map of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879,

General direction ENE. This is the direct water route to Lungmoonyün up the East River and the Tsêng Kong.

For the first 55 miles the route traverses a rolling plain, thickly populated, with a number of large villages and towns. The country then becomes mountainous, and the river for the last 30 miles is much obstructed by rapids. Nevertheless, there is considerable boat traffic. The route has not been traversed in detail, and distances, especially after Shektan at mile 38, are approximate only.

miles	
0	**CANTON,** P. T. RS.
	For details to mile 33 see Route 34.
33	Route turns l. up *Shektan* or *Tsêng River*, the clear water of which contrasts with the muddiness of the East River. The entrance is marked by no conspicuous object, low grassy banks lining its lower course.
34	Route turns N. Country on either side consists of green fields with fruit orchards and large villages surrounded by thick groves of banyan and fruit trees.
34½	**Wan-po,** village on r.
	Affluent from **Tong-pin** and **Pekkong,** P., comes in on r.
35¼	Route turns r. and goes NE.
36	Small creek on l. Channel deeper.
37	Villages on r. and l. Pekkong ½ mile distant on r.
37½	Creek on r. connecting with Pekkong river (see mile 34½)

miles	
	Route turns N.
37¾	Canton–Kowloon Ry. crosses the river by a bridge of 3 spans of 110 ft., and 2 spans of 60 ft. each. Shektan Ry. station ½ mile to r.
38[1]	**Shektan,** P. RS., market town on l. **Yeung-chow-mi,** village on r. This is the centre of a great cluster of large villages. Extensive orchards of lichees in the neighbourhood along the river banks.
38¼	Route turns r.
38¾	Route turns l.
39¾	Route turns l. and goes N.
40¼	Ferry. Sandy bed, fordable in dry weather. **Sin-tong,** village on l.
40¾	**Ten-sam,** village on r.
41¼	**Ti-kung,** village on r. Creek connecting with the *Wong-ka-san River* goes off on r.
42	**Ch'o-k'ai,** village on both banks.
42½	Low hills on l.
45	**TSENGSHINGHSIEN,** P., district city on l., with a fairly good wall around it. A short distance below the town is an island with a striking grove of caryota palms. The trade of the place, which is small, is mostly carried on near the east gate by the river. To the NW. is a cluster of large villages, where the leading gentry of the district live.
	For the next 20 miles few towns are seen along the river, the people living mostly in villages inland.
48	**Siu-low,** village on l., near mouth of affluent coming from **Miu-tam,** a market centre 4 miles distant.
50	**Yeung-mui,** village on r., opposite mouth of affluent coming from **Paitam,** P., 5 miles distant on l.
52	**Kim-ngao,** village on r.
55	**Chingkwo,** P., busy market town on r., with shops

[1] The distance from the mouth of the Tsêng River to Shektan is given by Henry as 12 miles, which seems greatly over-estimated, although it agrees roughly with the Provisional Map.

miles

extending for nearly a mile along the bank. Outlying spurs of the *Lo-fan Mts.* approach the river here. A fine wooded hill, with noted Buddhist shrine, rises behind the town.

Route now enters mountainous country, through which the river winds.

63 **Lung-t'an-p'u,** village on r. A short distance above this point is a narrow pass where the cliffs come down to the water's edge, with a small island just above. Hence the name *Leung-lung-chang-chü* (Two Dragons contending for the Pearl). Tigers are found in this vicinity.

71 Affluent coming from **Su-t'in,** about 18 miles distant, on l. **Wingtsing,** P., and **Miu-tsz-kok** on its l. bank, 2 and 4 miles distant respectively.

Lung-fu-t'an (Dragon and Tiger Rapid) just above the confluence of the two streams. The swift current is checked by heavy dams, over some of which the water falls 4 ft. or more. The passage left for boats is narrow, and the ascent requires much skill on the part of the boatmen.

The country now becomes more hilly, and the amount of land open to cultivation is small. Groves of pines and bamboos cover the hillsides. But few villages are seen. From here to Lungmoonyün numerous small streams enter the river on both sides.

76 **Ma-cha,** village on r.

79 **Ngau-k'ai-sun,** village on r.

83 **Shui-hau,** village and creek on l.

Mong-fu Shan, prominent peak with wide-mouthed caverns near the top.

84 **Yeung-kai,** village with conspicuous pagoda on hill.

85 **Sha-kong,** small market town on l., with a stream of clear water flowing through its streets.

89 **Ho-yeung,** village on l.

Fu-t'iu-Shek (Tiger's Leap Rock) *Gorge.* Massive

miles

cliff on l., and low rocky hill running along the shore on r. Between them the narrow channel is obstructed by a series of rocky pillars extending across the stream. The only available passage, about 12 to 14 ft. wide, lies between the two middle columns. When the current is strong, great skill is required to steer boats through this opening, and in times of heavy rain they sometimes have to wait for a week or ten days for the waters to subside. Above this point the river sweeps in a great curve along the foot of the hills on l., forming an extensive sandbank on r.

93 **Lungwahü N.,** P., an important centre where two market towns with many villages adjacent lie facing each other on opposite sides of the river. Large limestone quarries in the hills. Over 100 boats for transporting the lime were seen moored at this place.

In the upper portion of the river the rapids and dams make it almost impossible for boats to ascend except in company, so that their crews may render mutual help.

95 Affluent on r. coming from **Lu-k'ai,** about 5 miles distant.

98 Route turns l. General direction NW.

100 Affluent on r. The most difficult rapids on the river occur in the next 3 miles.

103 **LUNGMOONYÜN,** P., a small district city, and head of navigation for larger boats, though small craft can go some 25 miles further to **T'it-kong.** On a prominent hill below the city stands the Lungmoon Pagoda, overlooking a plain of much fertility. Rice, sweet potatoes, and whampees of a superior quality are grown. The surrounding country is mountainous and occasionally wooded.

From Lungmoonyün a post-road goes N. to **Chongning,** P., a city about 30 miles away, which lies at the head of navigation on the Sin-fung Kong,

miles

a large tributary of the East River (see Route 22, mile 72¼). To the W. a road leads over rugged mountains divided by deep valleys to **Leunghowhü,** P., on the Tsungfa River (see Route 37).

ROUTE 37

CANTON (SHAMEEN) TO TSUNGFA

Water Route (59 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 13; War Office Sketch Map, no. 115 (Canton–Hankow Railway, vicinity of Canton), 1905; Admiralty Charts, nos. 2562, 1739; War Office Provisional Map of Kuang-tung, 1911; French Map, Canton Section, 1900; Chinese Map of Kwangtung, 1879.

General direction NNE. This is the direct water route from Canton to the small district city of Tsungfa. It proceeds up the main branch of the Canton River for about 11 miles to the junction of the Paknai and Tsungfa Rivers, and then continues up the latter. The Tsungfa River, originally shallow and rapid, has been greatly improved by dams, which serve the double purpose of irrigating the fields and confining the water into convenient channels for navigation. There are said to be no fewer than 137 of these dams below Tsungfa. They are all built on the same general plan. A line of pine piles is driven in diagonally across the river, with an opening 10 to 12 ft. wide for the passage of boats. At the lower extremity are set immense water-wheels with endless series of bamboo cups, which pour the water into a trough that conveys it to the fields. The dams are often built a short distance apart, with the openings on opposite sides of the river, obliging boats to take a zigzag course. Another means of irrigation much employed in these parts is the endless chain pump with a treadle worked by two men. In very dry weather resort is also had to deep wells, with old-fashioned well-sweeps. In

the lower part of its course the river winds through a broad plain bounded on the east by a range of hills of which the 'White Cloud' group is the southern terminal; and on the west by a range that runs through the Fayün district and forms the watershed between this and the streams flowing into the North River. To the north are the hills of Tsingyün, and east of them the range in which this river takes it rise. The valley is well cultivated and prosperous. Along the river banks are many market towns, and inland the plain is thickly covered with villages, many of them very populous. The river is lined with bamboo groves, and as one ascends the valley, pine-clad hills become more numerous and striking. These are often covered with a great variety of flowering plants. Fruit orchards are plentiful, especially lichee, olive, and pomelo.

Long narrow boats are used on the river, being specially adapted to the local conditions.

Distances after mile 16½ are approximate only.

miles	
0	**CANTON,** P. T. RS. Route starts from Shameen and goes WNW. up the Pearl River.
½	**Wong-sha,** terminus of the Canton–Hankow Ry. on r. Fatshan Creek on l.
1	Route turns r. up the *Paknai River.*
	General direction N. Belcher Island, with rice cultivation, on l.
1½	Creek on r. crossed at its mouth by the railway, which now recedes from the river.
2½	Creek on r. leading to the Canton College. The railway crosses it twice. Mud fort on l.
2¾	**Foi-lo,** village at mouth of *Shektsing Creek* on r. Half a mile up this creek is the Canton Arsenal and Powder Factory (on both banks). Shektsing Arsenal is 5¾ miles distant by water. Boats drawing 3½ ft. can go to a point 4¼ miles up the creek at all tides. At **Shektsing** the water is 5 ft. deep at high tide.
	Route turns l. between Belcher and Bourchier Islands.

miles	
3¾	Route turns r. Branch of Paknai River on l. flowing W. of Belcher Island.
4	Joss-house and steps at the foot of low hills on r. Low-lying marshy ground with rice cultivation beyond.
4½	**Wong-sha,** village, and low hills on r.
4¾	Creek ¾ mile long connecting with Shektsing Creek on r.
5¼	Island over a mile long. Main channel on r.
6¾	Creek on r. leading to **Po-kong** and **Shakao,** P.
7	Rock marked by stone pillars.
7¾	*Sai-wa monastery* on l. Route turns l. and goes NW.
	Shekmoon, P., on r. Here is a rocky gateway in the line of hills through which the river passes, narrowing to about 100 yds. After the pass, the river widens again considerably.
8	Creek on r.
8¼	Branch of river on l. goes S. to Encounter Reach. Island at its mouth and village on its further bank opposite.
8¾	Three-storey pointed pagoda on r. Flat country on both banks.
9¼	Stakes in river on l. Three-storey pagoda on r.
10	*Lupao Creek* goes off on l. (see Route 42).
10¾	Creek on l.
11¼	Island about ½ mile long at junction of Paknai River (see Route 41) and *Tung-hoi Ho* or Tsungfa River. Route turns r. and goes up the latter. General direction E.
12	Low hill on l. River about 300 yds. wide. Water clear.
12½	**Nam-kong,** village on l. Hill 70 ft. high just behind the village. Island 600 yds. long on r.
13	**Sam-yuen-kong,** village encircling base of small hill on l.

miles

Shakao, P., a somewhat smaller village on r., at the mouth of a creek leading to **Tei-kong** and **Po-kong,** about 2 miles distant (see mile $6\frac{3}{4}$).

River narrows here to about 100 yds., then widens out to $\frac{1}{4}$ mile.

$13\frac{1}{2}$ Two adjacent hills, each 160 ft. high, $\frac{1}{4}$ mile away on l., with spur coming down to river bank. Island nearly $\frac{1}{2}$ mile long. Main channel on l. Route turns l. and flows N.

$14\frac{1}{2}$ **Lung-fu-tan,** large village 200 yds. from bank on r. Low hills for $\frac{3}{4}$ mile on l., with long straggling suburbs of Kotong between them and the river.

$14\frac{3}{4}$ Two islands.

$15\frac{1}{4}$ **Kotong,** P., on l. (See Route 49, mile $13\frac{3}{4}$.) An island $\frac{1}{4}$ mile long is separated from the town by a narrow channel.

$15\frac{1}{2}$ Island $\frac{1}{4}$ mile long in midstream, over which the Canton–Hankow Ry. crosses the river. Bridge of eight 60-ft. spans on l.; seven 60-ft. spans on r. Here route turns E., and river becomes gradually narrower.

$15\frac{3}{4}$ **KONGTSUN,** P. RS., a busy town on l., extending more than $\frac{1}{2}$ mile away from river.

$16\frac{1}{4}$ Hills on both banks.

$16\frac{1}{2}$ River narrows to about 100 yds. and widens again. Route turns l. General direction NNE.

24 Affluent on l. from **Fayünshing,** P., about 14 miles distant. Plain thickly covered with villages.

Route turns r.

$27\frac{1}{2}$ Affluent on r.

29 **Chuk-liu,** large village with Presbyterian Mission Chapel, near mouth of small creek on r.

30 Route turns l.

32 Route turns r. General direction NE.

$34\frac{1}{2}$ **Shek-kok,** small market town on l., with fine olive orchards opposite.

miles	
37	Route makes a right-about turn, encircling a hill, and goes S.
39	Route turns l. and goes ENE.
40	**Chungloktam,** P., ½ mile away on r. A road from Canton passes through this town and continues to Fayünshing on l. **King-t'ong,** village on l.
43	Flat-topped hill 2 miles distant, and affluent on r. Route turns l. and goes NNE.
43¼	Island ½ mile long.
44½	River narrows.
47	**Taipingchong,** P., small market town about ½ mile distant on r.
48½	*Ma-tsz Shan* (Colt Hill), ½ mile distant on r.
50	Low range of hills running E. and W. approaches river on l.
51	**Kwaitsuihü,** P., a village picturesquely situated on a cliff that projects into the river on l.
52	**Lo-kong,** village on r.
54	**Shenkong,** P., a small town on r. Fine wooded hills behind.
58	Pagoda at foot of hill. Fine granite bridge, supported on 15 piers, just beyond.
59	**TSUNGFA,** P., a small and insignificant district city on l., situated near the mouth of a stream coming from a small lake a few miles to the N. Trade centres in the town of **Kai-hau,** ½ mile to the E. Above Tsungfa the river is very narrow and difficult. From **Leunghowhü,** P., which is reached after a journey of some 20 miles in small shell-like boats, a post-road leads over rough mountainous country to **Lungmoonyün,** P., a distance of about 40 miles. (See Route 36, mile 103.)

ROUTE 38

KAI-HAU TO TSINGYÜN

Land and Water Route (64 miles)

Authorities : B. C. Henry, *Ling-Nam*, chap. 14 ; War Office Provisional Map of Kuang-tung, 1911 ; War Office Sketch Map no. 337 (1908) ; French Map, Canton Section, 1900 ; Chinese Map of Kwangtung, 1879.

General direction W. by N. Routes 38, 39, and 40 follow the same road as far as Tongtong at mile 31. This road crosses the plain lying north of Tsungfa for a distance of about 10 miles and then rises gradually over a mountain pass, descending rapidly on the other side. The rest of the journey is accomplished by boat, first on a small stream flowing into the Pa Kong at Tongtong, then down this river through country which soon loses its mountainous character, and finally along the North River to Tsingyün.

Throughout the region traversed by this route the Puntis were found to be occupying most of the plains and level arable land, while the Hakkas were in possession of the upper and less accessible valleys. The latter excel the Puntis as farmers and labourers, and are likely to expand over the plains.

Distances are approximate only.

miles	
0	**Kai-hau,** ½ mile E. of Tsungfa. The route starts N. along a broad wheelbarrow path running between fertile fields of sugar-cane, peanuts, taro, rice, barley, peas, beans, squashes, and other crops.
10	Country now becomes hilly.
15	Gradual ascent along the course of a mountain stream with many cascades. The water-power is utilized by several incense mills. The Chinese pine, which furnishes timber for boat-building, is almost the only tree to be seen on the lower hills.
	Lung-t'am-ha, narrow defile leading to the top of the pass. Smaller gorges open into the main defile.

miles	
19	Mountain inn, the only one in the pass, at a point where several valleys converge. Ascent now becomes steeper. Another species of pine (*Cunninghamia sinensis*) occurs here. Its timber is much prized by carpenters.
21	Top of the ridge, about 1,000 ft. above the plain, and boundary between the Tsungfa and Tsingyün districts.
	Rapid descent on N. side of pass. Deep ravines open from the path.
23	End of descent. General direction NW.
26	Village. From here by boat down the small stream that flows past the village.
30½	Boiling spring, giving off clouds of sulphurous gas, 50 yds. distant from stream. The water is used for domestic purposes, and also for irrigation.
31	**Tongtong,** P., market town at the junction of 3 small rivers, the *Kat Ho* or northern branch, the *Wong-fa*, and the *Wang-tung* (the present route), which unite to form the *Pa Kong*.
	Route turns down the Pa Kong. General direction W. by S. Hills recede, and become small and barren.
38	**Kwantsin,** P., on r., large market town noted for its pork. Below this point the river flows between low banks and over nearly 100 dams before the North River is reached. For the last 6 miles before Pakonghow the river is a sluggish, ditch-like stream.
47	Canton–Hankow Ry. crosses river. Pakonghow station on r. Route turns l.
47½	**Pakonghow,** P. RS., on r.
48½	Route turns r.
50	*North River*. For the remainder of the route to Tsingyün, see Route 55, mile 51½ *et seq.* (reversed).
64	**TSINGYÜN,** P. T. (see *Gazetteer*).

ROUTE 39

KAI-HAU TO FATKONGTING

Land Route (45 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 14; Chinese Map of Kwangtung, 1879.

General direction N. by W. The route leads from Tongtong through somewhat hilly country to the Kat Ho, the main branch of the Pa Kong, and follows its course through the Great Temple Pass. Navigation is possible as far as Shek-kokhü, in spite of rapids. Fatkongting lies a mile further on to the E.

miles	
0	**Kai-hau.** For details to mile 31 see Route 38.
31	**Tongtong,** P. General direction NE. Route crosses several streams by rustic bridges or shallow fords. In places road lies between hedges of rose trees. Many groves of camphor trees and small groups of pines. Several valleys on either side.
38	Route crosses *Kat Ho*, a clear rapid stream, just below a sharp bend. After a few hundred yards along a deeply cut path covered over completely by shrubs and vines, the road again meets the river, which has flowed nearly a mile round a curve.
40	Route enters *Ta-miu-ha* (Great Temple Pass), which is about 1 mile long. Hills at lower extremity high and precipitous. The river winds through the pass in two long curves, falling near the centre over some rapids, which are a serious obstacle to navigation.
41	Large temple near head of pass. Deep valley opens in ridge of hills just above.
42	Route crosses river and strikes across more level

miles	
	country, passing through several large villages Peculiar temple with diagonal doorway.
44	**Shekkokhü,** P., town on l., head of navigation for all boats, and centre of trade for a large district. Population a mixture of Hakkas and Puntis. To the E. the former predominate, to the W. the latter.
45	**Fatkongting,** P., a very small town and military post enclosed by a circular wall with only one gate. It stands on a plain with high mountains to the N. and S. On the N. the ridge is 2,000 ft. above the plain, and contains a fortress called *Kun-yam-chai*.

ROUTE 40

KAI-HAU TO WONG-FA-SHEK-CHAI

Land Route (46 miles)

Authority: B. C. Henry, *Ling-Nam*, chap. 14.

General direction NE. The route leads along the course of the Wong-fa River, a small mountain stream, to the fortress of Wong-fa-shek-chai, about 15 miles E. of Tongtong. In the last 7 miles the road passes through a long unbroken rift in the hills known as the Wong-fa Gorge. No detailed map of the district is available.

miles	
0	**Kai-hau.** For details to mile 31, see Route 38.
31	**Tongtong,** P. For the first 3 miles the route follows the road to Fatkongting (see Route 39).
34	Route follows the course of the Wong-fa River. General direction E. Abundance of wild flora and cultivated plants.
39	Entrance of *Wong-fa Gorge*, which extends for about 7 miles without a break. The course of the

miles	
	stream flowing through it is blocked in many places by immense granite boulders. About a third of the way up, these form convenient piers for a fine bridge across the stream, the timbers being mortised into the natural rock and made secure by braces fastened from one to the other. Hills on r. are steep and precipitous, with numerous projections and deeply-cut ravines running down to the river, while those on l. are more smooth and regular. Road excellent, and kept in good repair.
43	Waterfall 100 ft. high.
43½	Narrow gorge on r. about 60 yds. across, with steep walls and a stream of clear water flowing down it. Up the gorge a path leads through a gateway in the rock to some villages in the valleys beyond.
44	Waterfall 50 ft. high. Hills on l. become more thickly covered with trees. Narrow ravine with mountain torrent on l.
44½	Route passes over the top of a waterfall.
45	Hills converge, and stream flows in a deep channel only a few feet wide between solid rocks.
45½	Route emerges from pass and enters Wong-fa valley, where six or seven small villages in fine positions comprise the population. Goitre prevalent.
46	Village at the foot of a bare hill, on which stands the fortress of *Wong-fa-shek-chai*, a great mass of columnal rock towering above the surrounding hills, and containing three caves, formerly occupied by bands of outlaws, but now deserted.

ROUTE 41

CANTON TO SHEKKOK

Water and Land Route (42½ miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 13; Admiralty Charts, nos. 2562, 3218; Sketch Map of Lines Canton to Yuen-tam; War Office Provisional Map of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879.

General direction NNW. This is the direct route from Canton to Shekkok on the North River. It follows what is generally considered as the main branch of the Canton River, though the Tsungfa River, which comes in at mile 11¼, probably contributes a larger volume of water. At Paknai (mile 33) navigation ceases, but the route continues parallel to the stream, and strikes the North River a couple of miles below Shekkok.

On the first stage of the journey the surrounding country is for the most part flat, with a few isolated hills, fairly populous and well cultivated. After the entrance to the Lupao Creek at mile 13¾ a belt of hilly country is traversed, though the only elevations of importance are the hills standing on each side of the river about 5 miles below Paknai. As the North River is approached, the country becomes low and undulating, with a few bare hills. There are several small towns and out-lying villages between Canton and Paknai. The route gradually diverges from the line of the Canton–Hankow Railway as it proceeds further north.

There is much discrepancy between the available maps of the district; on the whole, Admiralty Chart no. 2562 appears to be the most reliable.

miles	
0	**CANTON,** P. T. RS. For details to mile 11¼, see Route 37.
11¼	Island at mouth of Tsungfa River on r. Route continues N. up the Paknai River, which is said to

miles	
	have been the old channel of the North River before the construction of the Shekkok barriers.
11¾	Island. Low hill on r.
12½	Creek on r.
13¼	Island ½ mile long.
13¾	Creek on l. joining Lupao Creek at **Kumkai,** P., 2 miles distant.
14¼	Ferry. **Hong-kong-t'au,** straggling village on r.; **Hap-shuk,** small village on l. General direction NNW.
15½	Creek on r. leading to **Cha-tun** and a cluster of other villages.
15¾	Creek on l. Route turns r. and goes N. Low hills ½ mile distant on l. Plain on r.
18¼	Creek on r. leading to **Sam-wa-tin** Ry. Station, about 5 miles distant. A branch of this creek is said to go to **Szelinghü** (6 miles) and **Fayünshing** (16 miles). Route turns l.
18½	**Mao-yi-t'au,** village on l.
19½	Route turns r. and goes N.
20½	**Ma-kai-ts'un,** village ½ mile distant at foot of low hill on r. Route makes a sharp turn to l. General direction W.
21½	Creek on r. leading to **Kun-t'in** Ry. Station.
22	**Tanpo,** P., large straggling village on l.
23½	**Shui-sai,** village on l. Route turns r. General direction N.
25½	Route passes between two prominent hills facing each other on opposite sides of the river. Hill on r. is V-shaped. Pagoda on summit of each.
27	**Chiknai,** P., large village on r. Route turns l. River winds for next 3 miles.
30½	Creek on r. Route turns l. and goes N.
33	**Paknai N.,** P., town on l. Head of navigation. Creek goes off on l. in SW. direction to join Lupao Creek, about 7 miles distant. From here route follows a postal road going NNW. to Shekkok.

miles	
34¾	**Mok-kong-tong,** village. Line of low hills on l. Paknai River on r.
36¼	**Mok-tai-hü,** village on boundary line between Fayünshing and Tsingyün districts. Route touches river on r. and turns l.
40¼	Route meets North River on l. at a point where it bends N., and follows its bank amidst bamboo groves.
40½	Embankment, continuing to Shekkok.
41¼	**Chuk-wat,** village.
42¼	Trees.
42½	**SHEKKOK,** P. (see Route 55, mile 37½).

ROUTE 42

CANTON TO LUPAO

Water Route (39 miles)

Authorities: Admiralty Charts, nos. 2562, 3218; Chinese Map of Kwangtung, 1879.

General direction NW. This is the shortest water route from Canton to Lupao on the North River. It proceeds up the Paknai River and enters the Lupao Creek at mile 10. The distance from this point to Lupao is about 15 miles as the crow flies, but owing to numerous sharp bends the length of the journey by water is nearly double that figure. Lupao Creek would appear to have plenty of water, even for large junks, during the greater part of the year, the soundings taken by Commander Hutton in 1913 varying from 6 to 24 ft., with as much as 54 ft. opposite Kumshanhü. It is said, however, to be nearly dry in January. Steam-launches plying between Canton and Lupao generally prefer the more roundabout route via the Fatshan branch, Samshui and the North River.

The waterway is flanked by hills on the north, of which those rising in the neighbourhood of Kumshanhü are the most con-

siderable. To the south, the country is generally flat and low-lying. Kunyiu, situated at the junction of the canal leading to Samkong and Sainam, is the most important commercial town on its banks.

miles	
0	**CANTON,** P. T. RS. For details to mile 10, see Route 37.
10	Route turns l. up *Lupao Creek.* Depth of water 12 ft. Paddy fields on r. Limestone quarry on l.
10½	**Kaotong,** P., large village on l. Route turns r. and goes NW.
11½	Three-storey pagoda on l.
13	Creek on r. connecting with *Paknai River* (see Route 41, mile 13¾), with island at its mouth. Depth at this point 9 ft., rapidly increasing to 24 ft. Route makes a sharp turn to l. and goes SW.
13¾	**Kumkai,** P. (Kumkai-hue on Admiralty Chart), on r.
14	Village on l. marked Kumkai on Admiralty Chart Depth of water 9 ft.
14¼	Sheds on l. From here an embankment runs for about a mile along creek on l. Flat country on r. Creek becomes wider and deeper.
15½	*Kumshan* (Golden Hill) *Island,* rocky and wooded, ½ mile long. Channel 15 ft. deep to l. of island.
15¾	Route turns r. and goes NW.
16½	**Kumshanhü,** P., village on r. *Po-toh-sz,* ancient Buddhist monastery, on l. This is a favourite anchorage for fishing-boats. Range of hills to N. Broad plain on S. Route turns abruptly l. and goes SSW.
16¾	Joss-house on r. From this point to mile 33¾ a continuous series of low hills skirts the bank on r. at an average distance of ½ mile.
17½	Clump of trees on l. Paddy fields on r. Depth of water 21 ft. Route turns r.
19	**KUNYIU,** P., busy market town on l. Just beyond, a creek goes off to **Samkong S.** and **Sainam** (see

miles	
	Routes 43 and 44). Water 24 ft. deep at its mouth. Route turns r. General direction WNW.
19¾	Temple and mausoleum on r. Depth of water 9 ft.
20¼	Route turns r.
20½	**Wa-shan,** village on l.
20¾	Temple on r. Country on l. low-lying and thickly wooded.
21¼	Route turns l. Hill on r., with village of **Ham-u-hap** at its foot.
21¾	Island. Channel 9 ft. deep on r.
22¾	Route makes a right-about turn and goes NE.
23	Scattered trees on l.
24	Low scrub and paddy on l.
24¾	Route turns l. **Hai-chu-kong,** village on r.
26	Solitary tree on l. Sand waste on r. Depth of water 6 ft.
26¼	Groyne projecting on l. Route turns r.
27	Island at mouth of small backwater on l. Land on r. low-lying.
28	**Ping-kong,** village on r. at the foot of a hill with slate quarries. Depth of water 6 ft. Route turns l. and goes NW.
29	**Lam-shan,** village on r. Coal outcropping on hills in the neighbourhood. Flat country on l. Route turns l.
29¾	Yellow cliff on l.
30¼	**Lo-ts'ün,** village on l. Clump of trees on opposite bank. Depth of water 12 ft.
	Route turns r. and goes N.
31	Route makes a left-about turn.
31¾	Route turns r. **Yung-ts'ün,** village on r. Depth of water 6 ft.
32	**Wang-ts'ün,** village on l. Route turns r. and goes NNW.
32½	Paddy fields on both banks.
32¾	White house on r. Low hills on l.

miles	
33	Hills come down to bank on r.
33¾	Paddy fields on both banks. Depth of water 15 ft.
34¼	Temple on r. Bamboo groves on l. Creek leading to Paknai N. goes off on r. (see Route 41, mile 33). Route turns l.
34½	**Shui-kong,** village on r. at foot of small hill.
35	**Tak-shui,** village on r.
35½	Red cliff on l. Low red hills run for about a mile along bank on r. Depth of water 10 ft.
36½	Route turns l. and goes SSW.
37	**Nan-ming-kong,** village on r.
38	Island. Channel to l. Depth of water 15 ft. Route turns r.
39	**LUPAO,** P., important town on r. at junction of creek with North River (see Route 55, mile 18½). Depth of water at mouth of creek 9 ft. Depth of North River at Lupao 4 ft.

ROUTE 43

CANTON TO SAMKONG S.

Water Route (22 miles)

Authorities: Lieut. J. A. Strick, Nov. 1894; Sketch Map of Approaches to Canton, no. 871, I, 1900; Admiralty Charts, nos. 2562, 3218.

General direction NW. Lieut. Strick travelled in a launch drawing 3 ft. 7 ins. via Encounter Reach and a creek to Kum-shanhü, thence by the Lupao Creek to Kunyiu, and finally down the Sainam Creek to Samkong S. Encounter Reach runs west from the south-west corner of Belcher Island, and its entrance is about 2 miles from Shameen. There are two main channels in Encounter Reach when it turns north, that on the west side of the island not being suitable for vessels of 4 ft. draught at low tide. The eastern channel is the one in general use.

The intermediate distances along the route are given by time in Lieut. Strick's account; but the total distance from Canton to Samkong is computed at 28 miles, which is considerably in excess of the amount as measured on the charts. The creek in general varies between 100 and 200 yds. in width, though in places it is 300 yds. wide. The shallows have not more than 2 to 3 ft. of water at low tide.

miles (approx.)	
0	**CANTON,** P. T. RS. Route starts from Shameen and goes WNW. past the southern end of Belcher Island.
2	Western branch of Paknai River flows in on r. Route enters Encounter Reach. General direction W.
4	Woody Point on l. Above this the creek bends almost due N., a channel running each side of a long hilly island.
4½	Route turns r. up W. channel.
6	Northern extremity of island. Low hills on l.
7	Route enters creek on l. running NNW. to **Kumshanhü.** (This point was reached in one hour from the entrance of Encounter Reach.)
7¾	Long hill coming down to bank on r.
8¾	**Ho-ts'ün** (Hau-chune on Admiralty Chart), village on l., and **Li-shui** just beyond. From here the trace of the creek is not shown on the chart; but, reckoning by the time taken by the launch to travel from the mouth of this creek to Kumshanhü (80 minutes), the distance from Ho-ts'ün to the latter place should be about 7 miles.
12½(?)	**Pak-sha** (on Chinese map; Pak-shui in Lieut. Strick's report), village on r.
16	**Kumshanhü,** P. There is a shallow just before route enters the Lupao Creek.
	For details from Kumshanhü to Kunyiu see Route 42, miles 16½ to 19.
18½	**Kunyiu,** P. Route enters the Samkong creek on l.,

miles (approx.)	
	which goes in a westerly direction to Samkong S. A continuous bund, 10 ft. wide in parts, runs along the S. bank of this creek from here to Sainam.
19	Shallow ; 2 to 3 ft. of water at low tide.
22	**SAMKONG S.,** P., walled town on r. Large numbers of boats are to be found here.

ROUTE 44

SAMKONG S. TO SAINAM

Water Route (12½ miles)

Authorities : Lieut. J. A. Strick, Nov. 1894 ; Admiralty Chart, no. 2562 ; Sketch Map of route from Sainam to Canton, no. 876, I, 1900.

General direction SW. A creek runs the whole way from Samkong to Sainam ; but beyond Miu-t'au it is encumbered by sandbanks and shallows, many of which have only a few inches of water at low tide ; while about a mile above Sainam the channel is completely choked by sand in the low water season. In the wet season, however, the water rises from 6 to 7 ft., the stream always flowing towards Canton ; and the rise in tide at Fungkong is 1½ ft. The creek has a bottom of hard sand. From Samkong S. to Miu-t'au it is navigable at all seasons by vessels of not more than 4 ft. draught, but from Miu-t'au to within a mile of Sainam by flat-bottomed boats and sampans only, in the dry season.

There are embankments practically the whole way on both sides of the creek. That on the north side is generally 20 ft. high with gently sloping turfed banks. On top is a road of varying width with a single or double track of stone pavement (each track 1 ft. wide, and 9 ins. apart where double). From Samkong S. to Lo-hoi-hui it is mostly narrow, and in places only fit for infantry marching in single file. From the latter place to Sainam it is about 5 ft. wide. It might be advisable

to take this route by water as far as Miu-t'au, and then on foot by the embankment.

miles (approx.)	
0	**SAMKONG S.,** P. Creek 80 yds. wide; good depth of water. Banks supported by bunds 20 ft. high with road on top. Towpaths exist in places, but the bulk of the water traffic is done by oar and sail.
¼	Creek opens to 100 yds., which is its normal width.
2¼	**Sha-t'au,** small village. About 150 sampans and slipper boats usually to be found here. Stern-wheeler drawing 3 ft. runs to Canton in 7 hours.
2½	First shallow; only a few inches at low tide. Tide rises here 2 ft.
4¼	**Miu-t'au,** village.
4¾	Furthest point reached by stern-wheeler.
5	Sandbank stretching across creek from r. to l. Channel on l., carrying only a few inches of water at low tide.
	Pak-shek, village on r.
6	Stone step landing on l. Road to **To-wa-ping,** 2 miles distant.
6¼	Two similar landing-places.
7	**Fungkong,** P., large walled city 200 yds. from bank on r. Three stone step landings. 40 to 50 fair-sized boats.
	Here there is a break in the bund on r., and its place is taken by a road, very rough, and about 2½ ft. wide.
7¼	Passengers change into flat-bottomed boat, 6 to 7 in. draught. Channel winding.
7½	Bund approaches creek again, coming from some low hills behind Fungkong. Width on top, not more than 3 ft. There is also a track which crosses a small deep creek on a single plank bridge, and is therefore to be avoided by troops.

miles (approx.)	
8	Bund less than 4 ft. wide, but in good condition.
9	Creek on r. coming from **Lo-tsun-hoi.** Width 15 yds., depth 4 ft. Some 20 sampans and slipper boats to be found on it. Near its mouth, on the N. side, is the small village of **Lo-hoi-hui.** 30 or 40 acres of good camping-ground here. From Lo-hoi-hui to Sainam the road on the bund is about 5 ft. wide.
9¼	Creek 250 yds. wide. Large sandbank. Channel on r. only 4 to 5 in. deep at low tide, 300 yds. long. Stone landing stage and road to **Wa-ping** (see Route 45, mile 3), about 1 mile distant on l.
9½	Tea house on l. For the next mile there are 8 to 10 ft. of water. Flooded marshes beyond the bund on r.
9¾	Bund approaches bank on r.
10½	Channel shallows. Sandbank across the stream. A small artificial channel has been cut under bank on l.; 100 yds. after this point, 6 ft. of water. Low hills ¾ mile distant on r.
10¾	**Ko-fung,** village on r. Ferry, 2 ft. of water. Soon after this, 6 ft. of water as far as tea house.
11	Tea house on r. Bund on l. recedes from creek. Land side of bund on r. richly cultivated with paddy from here to Sainam. 100 yds. below the tea-house creek is completely choked with sand, and for about a mile there is no channel at low water.
11¾	Canton–Samshui Ry. crosses creek on an important bridge.
12	Three telegraph wires cross the creek, two underneath and one on high poles overhead, the former running from Canton to Wuchow, and the latter to Samshui. Near this point the channel begins again and continues to Sainam. Camping-ground of about 6 acres on r.

miles (approx.)	
12¼	Joss-house on l. Two bamboo bridges across the creek, which now enters the Fatshan Branch. Route turns r.
12½	**SAINAM,** P. (see *Gazetteer*).

ROUTE 45

SAINAM TO PO-TAI-SHUI

Land Route (20½ miles)

Authorities: Lieut. J. A. Strick, Nov. 1894; Sketch Map of route from Sainam to Canton, no. 876, I, 1900; Admiralty Charts, nos. 2562, 3588; Sketch Map of the Chu-Kiang, by Thomas Marsh Brown (*I.M. Customs Decennial Reports*, 1882–91).

General direction E. This land-route across the delta country from Sainam to a point 2 miles west of Canton has lost some of its importance since the building of the Canton–Samshui Railway. The road for the greater part of the way is a narrow path, sometimes paved, and only suited for men moving in file or single file. For the first half the country is more or less open and dry, but for the remainder it is heavily cultivated with large stretches of paddy. It is on the whole flat, fertile, and thickly peopled. Good water supplies could be obtained from the creeks and the village wells.

miles (approx.)	
0	**SAINAM,** P., 3 miles below Samshui on the l. bank of the Fatshan Branch (see *Gazetteer*). Route leaves by the two bamboo bridges at the mouth of the Samkong creek. These bridges could be crossed in single file only; but the substantial railway bridge spans the creek about ½ mile further up, and at low water the bed of the creek is dry near the railway bridge.

miles (approx.)	
¼	Joss-house almost hidden by trees on r. 20 acres of turf camping-ground. Road now goes ENE. along a bund or embankment. There is a double stone track as far as **Sa-tong-tong.**
⅞	Canton–Samshui Ry. crosses the embankment, which now turns l. and runs down to the Samkong creek. Route continues along another short arm of the embankment.
1⅛	Embankment ends, and road passes through paddy. General direction NE.
1½	**Sa-tong-tong,** village. For ½ mile the road is rough, passable for infantry but bad for artillery.
1¾	Stone causeway flanked by water 6 to 10 ft. deep and marsh on l., and leading to the foot of some hills 100 to 300 ft. high commanding the road from Sa-tong-tong. Width of causeway, 5½ ft.; length 200 yds.; opening in centre 12 ft. wide. Good camping-ground on the hills ½ mile to r.
2⅛	**Tung-kong-hui,** village. General direction ENE.
2⅝	**Sai-chuk,** village. Undulating hilly country. Road runs up a small cultivated valley, being only wide enough for two men abreast, and leads through a cutting 50 ft. long and 20 ft. deep at the top of a low hill. The country is suitable for camping.
3	**Wa-ping,** village at foot of the hill, 300 yds. distant on l. For the next 1,000 yds. road in good condition but only passable in single file, winds through cultivation and hills, ditches with water on both sides. It then becomes a track through open country, passable for all arms.
4½	**Ankonghü,** P. (Ngan-kong-hui in Lieut. Strick's Report), large village, chiefly on l. Road passes outside and also through the village.
4¾	Group of buildings with pawnshop terminating the village at the top of a slight rise. Country beyond is

miles (approx.)	
	undulating and wooded, and road is a mere track. General direction E.
5¼	**Siulam W.,** P., straggling village. Road becomes a single stone track, mostly wide enough only for infantry in file. After 600 yds., route passes through another portion of this village—about 250 yds. of narrow street. The village could easily be skirted, especially in dry season; country open. A track leads from here SE. to Fatshan.
5¾	Route leaves Siulam village. Road a track, but passable for all arms. General direction ENE.
6⅜	**Lau-mêng,** village. From this place the road for ½ mile is a single stone track across paddy, then for ½ mile along an old stone causeway. Remainder of distance to T'ong-pin through undulating country with occasional paddy-fields.
7⅝	**T'ong-pin,** village. Road passes for 400 yds. round the village through a doorway 5 by 9 ft. blocked at the foot by stones 1½ ft. high; then to rise of some low hills. Road a track, country undulating. General direction E.
8¾	Bridge over tidal creek. Length 12 ft.; width 6 ft.; height 14 ft.
9¼	Bridge over tidal creek.
	Yüan-t'ong. Road skirts village for 400 yds., passing through gateway 4½ by 8 ft. Good camping-ground on r.
9⅝	Tea house. Track goes off on r. to Fatshan.
9⅞	Fir plantation on l. Route turns r. and goes ESE.
11	**On-wai-lei,** village on r.
11½	Stone slab bridge, 4½ ft. wide.
11⅝	**Shek-hok,** village 200 yds. distant on r.
11¾	**Soi-mei,** village. Road to **Cheongkong** a single or sometimes two stone track through richly cultivated paddy and clumps of sugar-cane.

miles (approx.)	
12¼	Bridge 6 ft. long, 4½ ft. wide, 3 ft. high.
12⅝	Fine stone bridge over *Taipo Creek*, which runs N. via **Taipo Tung** into Encounter Reach. This is a good waterway to Canton, and stern-wheelers run daily, but pilotage is difficult. Creek to S. runs by a shallow channel to Fatshan. Bridge of 6 arches, 30 yds. long, 7 ft. high, with 20 ft. opening in centre spanned by wooden planks to allow the passage of masted junks. The creek is tidal. Just beyond is the large village of **Cheongkong,** P. Plenty of boats could be collected here. Fair amount of junk traffic Pagoda on the bank of the creek 800 yds. distant on l. Two pagodas at a somewhat greater distance on r. Road from here is a one-man track through paddy fields, and in places not more than a stone paddy bund. Country richly cultivated; villages surrounded by trees, walled and loopholed for defence against river pirates. The paddy on November 17, 1894, was half cut, and when cut the fields are hard enough to march over. General direction ESE.
13¼	**Tai-lik-piu,** village. A road branches off here on r., going SE. to **Tailik,** P., where it crosses the Ping-day Creek by a stone bridge 9 ft. wide, called *Kan-chuk-kiu*, and then bends ENE. to rejoin the present route at mile 17¾.
	From Tai-lik-piu the road is winding. General direction E.
14¼	Walled village on r. *Mong-ma* hills in the distance on l.
15	**Ng-ui,** village. Single stone track through small groups of houses to Shapo.
15⅞	**Shapo,** P. Here the *Ping-day* Creek is crossed by ferry. It runs into Encounter Reach at **Wongchukki,** P., and is a good waterway for boats of 5 to 6 ft. draught.

miles (approx.)	
	Large stern-wheelers from Canton run to Tailik, about 2 miles to the S. The creek continues to Fatshan, but the latter place can only be reached by junks at the top of the tide. Over 100 boats of different sizes could be collected at Shapo, where there are 2 stone jetties. There is no towing-path along the creek. Fir plantation on r. No camping-ground in this vicinity, but the Chinese houses are well built. The crossing of the creek at this point could be avoided by taking the road through Tailik mentioned at mile 13¼.
	Road winds ESE. through paddy fields.
16½	**Ping-tai,** village. 3-plank bridge on stone upright. Road passes out of village through a doorway, 6 by 10 ft. 6 masts and pagoda on l. Paddy fields.
17⅛	**Wong-kong-hü.** Road 5 ft. wide runs 500 yds. through the village. In centre of village is a tidal creek, 20 yds. wide, crossed by stone pile bridge. Exit doorway 4 ft. wide by 9 ft. high. Road passes along short embankment and bends SE. through flat paddy country.
17¾	Tea house. Road makes sharp turn to l. Here the road from Tailik comes in on r. and an embankment begins which carries the road to Po-tai-shui. Direction NE. for a few hundred yds. and then E.
19⅝	Bridge over creek ; 12 ft. long, 4 ft. wide. **Hong-hau,** village entered by doorway 4 by 9 ft., 200 yds. through streets ; exit through 2 similar doorways. Several small creeks used for paddy irrigation crossed by plank bridges.
20½	**Po-tai-shui** (marked Pak-i-shui on Admiralty Chart), small town on a tidal creek running eastwards into Fati Creek, and crossed about 1,000 yds. further on by the Canton–Samshui Ry. Shameen, about 2 miles distant, is reached by crossing another tidal creek, Oliver Island, and Pearl River.

ROUTE 46

CANTON TO SAMSHUI

Water Route (34 miles)

Authorities: Admiralty Charts, nos. 1739, 3588, 2562, 2734; Plan of Canton–Hankow Railway, Samshui Branch (4 sheets); Sketch Map of country between Canton and Samshui (1903); Sketch Map of the Chu-Kiang, by Thomas Marsh Brown.

General direction W. This is the shortest water route from Canton to Samshui for native shallow-draught boats. It starts south-west by the Fati and Fatshan Creeks, entering the Fatshan Branch at mile 6½ and following this waterway through the large and important town of Fatshan, Shahow S., Tzetung, and Sainam to Samshui.

This route is not regularly used by steam launches, owing to shallows. The main stream of traffic goes south of Fatshan via Moneypenny Creek and Tamchow Channel. Foreign steamers plying between Canton and the West River ports make a much longer détour to the south by the Saiwan, Taileung, and Mahning Junction Channels, entering the West River below Kumchuk.

The name Fatshan Branch, here applied to the whole length of the waterway between Samshui and the Pearl River, is sometimes confined to the western section as far as Tzetung, and to the eastern portion from its junction with the Fatshan Creek, this latter designation being used for the intervening stretch.

The country traversed, like most of the Delta land, is mostly flat, well cultivated, and populous. Between Shahow S. (mile 18¼) and Samshui, low hills occur along the banks.

The Canton–Samshui Railway runs more or less parallel to the route on the north, at a distance seldom exceeding a mile and a half, and for a considerable part of the way within a few hundred yards.

miles	
0	**CANTON,** P. T. RS. Route starts from Shameen up Pearl River, crossing to l. opposite **Wong-sha,** the terminus of the Canton–Hankow Ry.
¾	Route goes up *Fa-ti Creek.* **Shekwaitong,** P., terminus of Canton–Samshui Ry., ¼ mile to r. Ry. runs parallel with the creek for ¾ mile. General direction SW.
1½	Creek divides into two branches. The right-hand branch has only 1 ft. of water at low tide. *Ng-ngan-k'iu* (Five Eye Bridge) crossed by Ry. about ½ mile distant. Route goes up left-hand branch, which has 2 ft. of water at low tide and 5½ ft. at high tide.
3	Pagoda on l. Route turns r. into *Fatshan Creek,* which can be used by steam-launches at high tide, when there is 6½ ft. of water. At low tide they make a détour round Gough Island and enter the *Fatshan Branch* opposite Sepoy Island. General direction W.
3½	Right-hand branch (see mile 1½) joins on r.
4¾	Small creek on r. leading to **Kong-pak** and **Fu-pong** near Three Eye Bridge Station.
5½	**Yimpo,** P., a long, straggling village on r.
6	Pagoda on l. Creek goes off on r. to **Siupin,** P. RS., about 1½ miles distant. Route makes a sharp bend to l. and goes S.
6½	**Ngaihow,** P. (Keppel Junction). Route enters Fatshan Branch and turns sharply to r. General direction W.
8	Creek on r. leading to **Ki-cha** Ry. Halt and **Leung-pin,** about 2 miles distant.
9¾	**Sai-kiau,** village on r. Ry. approaches the creek.
10	Creek on r., crossed by the Ry. 1,000 yds. from its mouth, with village of **Kwaposun,** P. RS., midway. Route turns l. and goes S.
10½	Island. Small creek on r.
11½	**FATSHAN,** P. T. RS. (see *Gazetteer*). Thousands of boats are moored here.

miles

11¾ Creek comes in from **Titkao,** P. Moneypenny Creek on l. Here route turns sharply to r. and runs through the city, which extends for over 2 miles along both banks. General direction W. Ry. also turns W. and continues to run parallel to the creek, at a distance of 200 to 400 yds., as far as Chaipin. 3 ft. of water at low tide. Alluvial plain on both banks. Low hills of red sandstone not far away on l.

15¾ **Chaipin,** P., at the mouth of a bridged creek on r. leading to Upper Chaipin and Ry. Halt, about ½ mile distant. The total population of these two small towns is about 4,000. Low hills to N. Route now makes a sharp turn to l. and goes S., while Ry. continues WSW. to Siutong.

16½ Route turns r. Depth of water 2½ ft. at low tide.

18¼ **Shahow S.,** P., on r. Hill on l. Route enters upper reach of Tamchow Channel and turns r. This channel is used by passenger boats between Canton and Samshui, but steam-towing launches cannot pass, as in places there is only 1½ ft. of water at low tide.

19¼ Island.

19½ Joss-house on r.

19¾ Route turns l. Low hill on l.

20¼ **Tzetung,** P., town on both banks, chiefly on l.

20¾ Route enters *Shun-tak Branch,* which flows S., and turns r. Bar with 3 ft. of water at mouth of Tamchow Channel. Ruined fort on r. General direction N.

21½ Brick-kilns on r. Low hills behind.

22½ Group of three islands : the first one, in the middle of the river, is inhabited, and about ¾ mile long. Navigable channel on r. **Ma-cha,** village at entrance to a small creek on l. Joss-house on r. Village of **Lai-chi-yün** about ½ mile distant. River widens here to over ½ mile.

23½ Rest-house on r.

miles	
23¾	Pagoda on r., at the southern end of the town of **Siutong,** P. RS. (pop. 5,000).
24¾	Bar with depth of 3½ ft. Red cliff on r.
25¼	Ry. 50 yds. from bank on r.
26	Pagoda at mouth of small creek on r. leading to **Szetzetow,** P. RS., about ¾ mile distant. Route turns l. General direction NW.
26¼	Szetzetow Ry. Station about 250 yds. from bank on r. Low hills beyond.
27	Ry. recedes gradually from bank.
28	**Wong-ting,** village of 400 inhabitants about 500 yds. away on r., at the foot of a rocky hill.
28¼	Island opposite mouth of a creek leading to **Tsao-ma-ying** Ry. Station, about 1 mile distant on r. The town of **Tsao-ma-ying** is on the other side of the line.
29½	Creek on l. Bar with 2 ft. of water at low tide.
30½	*Lau-sha* (Old Sandbank), an island nearly a mile long, lying opposite the mouth of the *Samkong Creek* on r. (See Route 44.)
30¾	**SAINAM,** P. T. RS., an important commercial town stretching for about ¾ mile along the bank on r., with Ry. Station 700 yds. inshore (see *Gazetteer*). General direction W.
31½	Pagoda on the western extremity of *Lau-sha*. To the l. is *Sun-sha* (New Sandbank), a long island separated from the bank by a narrow channel. A line of low hills 500 yds. distant runs from here to **Kong-kên** on l. Hills come down to river on r. An embankment starts here and runs along the further side of a creek parallel to the river past Samshui as far as **Muk-min** on the North River. (See Route 47, mile 4¾).
31¾	**Tai-shan-t'ong,** village of 600 inhabitants on r.
32½	Farm-house on r.
33¼	**Luikong,** P., village of 300 inhabitants at foot of

miles	
	small hill on further side of the embankment about 400 yds. from r.
33½	Eastern limits of Samshui harbour. 8-storeyed pagoda 500 yds. distant on r.
34	**Ho-k'au,** customs station and port of **SAMSHUI,** P. T. RS., on r., with which it is connected by a road through paddy-fields about ¾ mile long. Midway is Samshui Ry. terminus. See *Gazetteer*.

ROUTE 47

SAMSHUI TO WAITSAP

Water Route (89 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. vi; Admiralty Chart, No. 2734; War Office Provisional Map of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879.

General direction NW. This route provides the easiest means of access to the easternmost corner of the province of Kwangsi. It ascends the Bamboo River, which rises some 20 miles above Waitsap, flows SE. for about 100 miles with many windings through hilly country, and enters the North River some 6 miles above Samshui. This river is usually known to the Chinese by the name of Sui or 'Fringe' River, in allusion to the continuous groves of bamboo that line its banks along the greater part of its course.

In the first section of the route, as far as Szewui, the average breadth of the river is from 200 to 300 yds., but the navigable channel is narrow and shoal, with many sandbanks. It flows between high clay banks, with clumps of trees at intervals, and barren hills a short distance back on each side. Mulberry plantations and fields of the ordinary cereals take up most of the adjoining country.

Szewui (mile 24½) is the first city of importance that is reached on the upward journey. Here the manners of the

people are rather rude, and the dialect spoken is much influenced by the Hakkas, who are gradually filling the more hilly parts of the district. Above this point the hills approach the river, and the long fringe of bamboo soon begins to appear. Kwong-ning is the great bamboo-producing district in the province. For 50 miles or more the groves continue practically without a break, not only covering the low lands along the river, but extending up the sides of steep and rocky hills. Only after the boundary of Kwangsi has been crossed do the bamboos give place once more to open cultivation. Altogether, some twenty species of bamboo are found, varying greatly in size, colour, and shape of foliage.

The route has not been traversed in detail, and above Szewui the distances given are only approximate.

miles	
0	**SAMSHUI,** P. T. RS. (see *Gazetteer*). Route starts WSW. from the custom-house, **Ho-k'au** (see Route 46, mile 34), passing S. of Rattler Island.
¾	Fraser's Hill, 200 ft. high, on l.
1	Low wooded hills, 150 ft. high, on l. Rattler Island, low, flat, and cultivated, on r. Bamboos along shore.
1¼	Route turns r. up North River by channel W. of Rattler Island, keeping close to l. Here there is a minimum depth of 6 ft. The eastern channel is shallow, having not more than 1½ ft. of water in places, and drying at low river. Sandbank on r.
	Kok-mi, village on l. Direction NNW.
1¾	**Kau-sam-shui,** village on l.
2¼	Island. Channel on r. General direction N. Embankment as far as Muk-min on r. Mulberry plantations beyond.
3¾	Hills running E. and W. 1 mile distant on r. To the N. of these is a lake of undefined limits.
4¾	**Muk-min,** large village on r. Hills to NE. of village. Low ground on l.
5¾	Sandbanks on both sides of river.
	Ma-fong, village on l.

miles	
6¼	Mulberry plantations on r.
7¼	Rock 4 ft. above water near bank on r. Just above is **Nam-tsuń-han** village, where the telegraph line to Shiuchow crosses the river. **Ma-fang,** village on l. Here route turns sharply to l. and goes up the Bamboo River. Depth at entrance, 10 ft. Width, 200 yds. General direction NW.
7½	Embankment for about a mile on l. to protect the country from floods at high water.
8¼	Channel between two islands.
9	**Pakmiu,** P., village on r. Behind is a stretch of marsh land which extends about 2½ miles to the N.
9¼	Ruined house on l. Here begins an embankment, some 3 miles long, which curves inland to the W. and meets the river again at mile 12.
9½	Pagoda on r.
9¾	Brickworks on r. Route turns l.
10¾	**Man-lan-li,** village on r.
12	**Shun-chai,** village on r. End of embankment on l.
12¾	Temple on l.
13⅛	Joss-house at foot of hills on r.
14¾	**Wongkonghü,** P., village on r. Temple on l. Rock in mid-channel.
16	Joss-house on l. Village with pawn tower on r. Route turns r.
16⅝	Joss-house on l.
17⅜	Temple on r. Low hills on both banks. Route turns l.
18¼	Island. Branch of river known as *Tsingki Creek* goes off on l. to join the West River, after a winding course, at **Tsingki,** P. (see Route 48, mile 5). Like the present route, this waterway is almost dry in winter.
18½	High hills on l.
19¾	Red cliff on r.
20½	Rest-house on l. Pine-tree hill and **Tak-kon** village on r.

miles	
23	*Lung-kong River* comes in on r. from the N. Route turns l.
23¾	Village on l.
24⅛	Joss-house on l. Route turns r.
24½	**SZEWUI,** P., head of navigation for ordinary steam-launches, with long extent of wall running beside the river on r. (see *Gazetteer*). The channel off the town is narrow, with depth of 4 to 5 ft.
25½	**Tsong-kong,** lumber mart connected with Szewui by a good road along the river, lighted at night by a line of lamps placed on posts. Great rafts of bamboo and pine timber are rearranged here for further transport. Large numbers of small boats would be obtainable.
28	**Pak-sha,** village on r. Character of the surrounding country gradually changes. Hills come closer to the river, and bamboos begin to fringe the banks.
34	**Shekkow,** P., large market town on l. at the lower extremity of the bamboo country, and chief centre of trade in the Kwongning district. Here great bamboo rafts are put together which drop down the river to Fatshan and Canton. Above this point bamboos grow along the banks close to the water, leaving no space for a tow-path, so that when the water is high and the current strong it is almost impossible for boats to go up. For miles no village or house is seen from the river owing to the thick screen of bamboos; but narrow paths winding through the groves lead to many prosperous villages, all engaged in some form of work on the bamboo.
44	**Wong-t'in,** market village at mouth of small creek on r.
48	**Ch'un-shui,** market village near mouth of affluent on r.
50	Affluent on l.

miles

51 **Shek-kan,** market town on r.

55 **Kun-po** (Kuan-p'u-t'ou) on r., the usual landing-place for officials on their way up the river. From here a road goes to **Kwongning,** P., some 6 or 7 miles distant. For some distance the bamboos form an impenetrable wall on either side. Away from the river the hills are still covered with groves of bamboo, but the low plains are given up to rice. A dozen villages are passed before the top of the ridge is reached, where there is a small rest-house. The descent on the other side is rapid, the road still winding amongst plantations of bamboo until a small sandy stream is reached, beyond which lies Kwongning, a straggling, unattractive district city.

57 **Tungheung,** P., the point of transfer for goods and merchandise at the mouth of a small affluent on r. The town is crowded into a narrow space between a high bluff and the river. From here a good paved road, beside which several fine memorial gateways are seen, leads to Kwongning, about 5 miles distant. There are several villages on the road, with some unusually fine houses. The neighbouring hills are infested by tigers.

60 *Wong-chuk Kong*, small tributary on l.

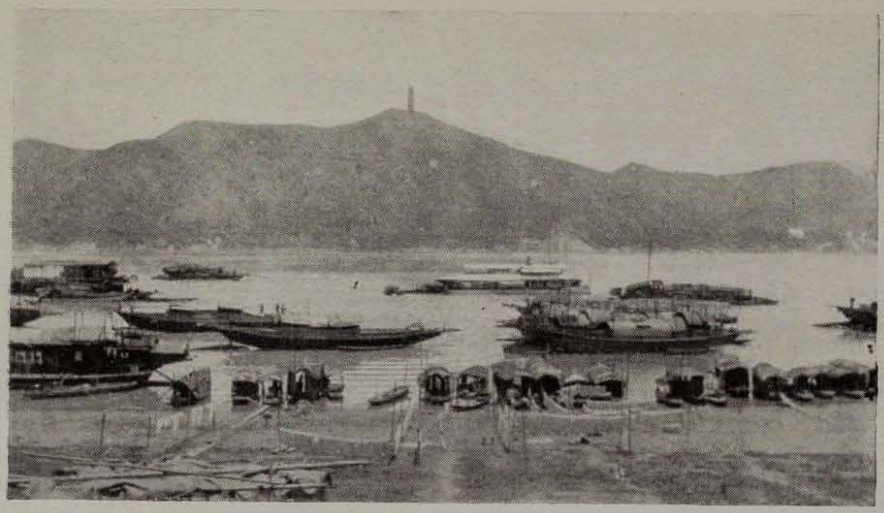
67 **Kushui Tung,** P., market town on r., at the mouth of the *Ku Shui*, an affluent coming from the E.

69 Tributary on l. Route turns r.

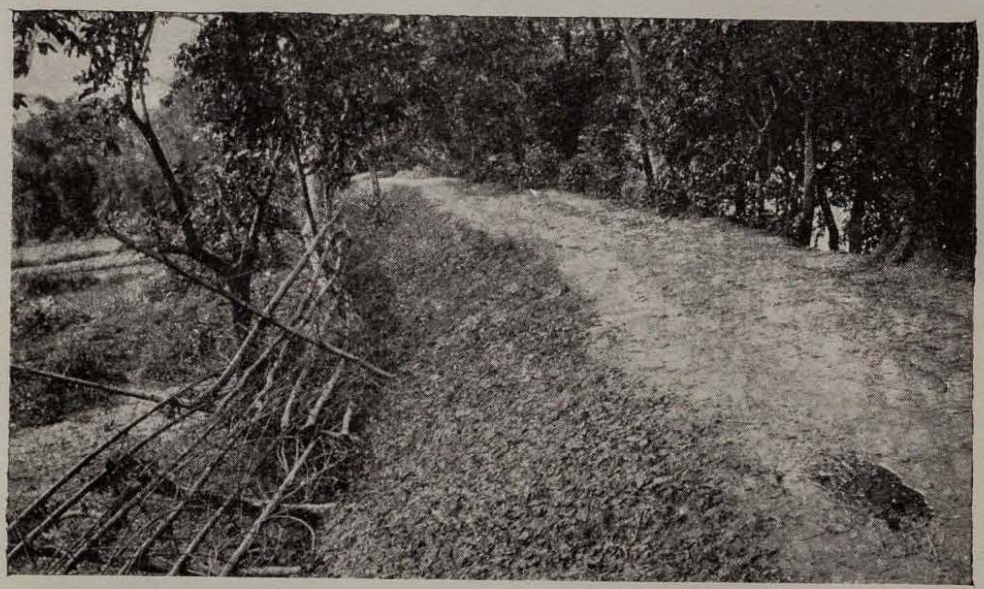
70 *Tai-hap*, a small pass, with temple. The hills on either side come down to the water's edge, projecting in rocky points into the stream. Above the pass the river winds through thick bamboo groves.

72 Boundary of Kwangtung and Kwangsi provinces.

74 **Ow-tsai,** a small market town, the first in the province of Kwangsi, situated on a high bank at the mouth of a small ravine. The streets are dark, dirty, and narrow. Above Ow-tsai the hills become higher,



WUCHOW FORESHORE



ROAD ON TOP OF DYKE, HOWLIK

miles

with thick growth in many places of chestnut, oak, and other trees.

84 A stream, almost as large as the main one, comes in on r. It flows down from a market region past the town of **Kak-shui,** some 20 miles N. of this point, and serves as a means of communication with the upper Linchow River (see Route 66, mile 67).

The hills now recede, bamboos become much more sparse, and open fields are seen, while the stream becomes more rapid.

89 **WAITSAP,** P., on r., district city and head of navigation for ordinary boats, though small craft can ascend 12 miles further to **Liangtsun,** P. The town is rather insignificant. Much of the space inside the walls is unoccupied, and the public buildings are in a dilapidated condition. There is a conspicuous pagoda on the opposite bank, and another some distance downstream. This neighbourhood is famous for its partridges ; there are many deer, leopards, and other animals on the hills. Waitsap is important as a point of entrance to Kwangsi province, but the population is not well disposed towards foreigners.

ROUTE 48

SAMSHUI TO WUCHOW

Water Route (133½ miles)

Authorities : Lieut. H. R. Thomas, May 1914 ; Admiralty Charts 2734, 2735 ; *China Sea Pilot*, vol. iii, pp. 391–8.

General direction W. At low water (in winter) the river is navigable from the mouth to Wuchow for vessels drawing up to 7 ft., and at high water for vessels drawing up to 13 ft. The current averages 1¼ knots at low river, but in flood-time may reach 6 knots in the gorges, varying with the height of

the water. Supplies, except meat, are plentiful. Coal of an inferior quality can usually be obtained.

A tidal rise and fall is perceptible at Wuchow, being about 12 ins., but it does not appreciably affect the current. The river has a considerable range of rise and fall owing to flood-water. Occasionally the water rises suddenly without warning. The river is generally at its lowest from December to March, and at its highest in June and July.

In all the gorges, and generally wherever the banks are at all steep, there are good tow-paths, but these do not usually exist where the banks slope gently, presumably because the varying height of the water would cause the distance from the water's edge to the path to vary greatly, and a path placed far enough up to be safe from floods would be too far from the river at low water. However, where the banks slope gently the current is not strong, and progress is made by poling and sailing. There are many unbridged side creeks.

The banks of the river are thickly populated, so only villages of 10 houses and more have been noted in the itinerary. There is a large trade in bamboos, firewood, and timber. The timber and bamboos are floated down in large rafts, and the corded firewood is transported in barges. Lines of steamers ply up and down the river to Canton and Hongkong. Above Wuchow traffic is carried on by means of shallow draught motor-boats as far as Nanning.

The distances in this route were measured from Admiralty Charts.

miles	
0	**SAMSHUI,** P. T. RS. (see *Gazetteer*). Route starts WSW. and crosses the mouth of the North River (see Route 47 *ad init.*).
1¼	Route enters creek connecting the North and West Rivers (the westernmost section of Samshui Reach), about 200 yds. wide. Tweed Point on l. Treaty port of **Kong-kên** just to S., and embankment 150 yds. distant running parallel to creek, with mulberry plantations in between. Low grassy bank

miles	
	on r. with cultivated land behind. General direction SW.
1¾	**Sun-hui,** village with guard-boat on l.
2	Creek narrows to 100 yds. Small hills on l. **Sün-kau,** village on r. Route enters West River and turns r. Direction NW.
3	*Kwong-sai Island,* about 1¾ miles in length and flat, covered in flood season. Village of 50 houses on l.
5	**Tsingki,** P., large village on r. at the mouth of the *Tsingki Creek,* about 150 yds. wide at the mouth, which is really the southernmost branch of the Bamboo River (see Route 47, mile 18¼). The point where the two branches separate is some 13 miles distant by water, and about midway is the town of **Taishahü,** P. Route turns l. and goes W.
6½	**Poi-sui** (about 30 houses) on r. Creek on l. leading to **Tin-shui,** with island and mud bank at its mouth.
7½	Three small villages and a few woods on l. Steep hills ¼ mile back. A small pagoda.
10	**Wing-on** (50 houses and pawnshop) on r., at the mouth of a creek. Passenger stage for steamboats. ½ mile W. of this village is a flat-topped hill about 70 ft. high and 300 yds. long, a good site for a camp.
10½	**Sa-po,** small village on l. at the entrance to a channel which passes S. of a low island 3½ miles long. Another village, **Ho-k'ai,** lies about a mile further up the channel.
11	**Ma-on-kong,** small village on r.
11½	**Wong-ch'a,** large village near the mouth of a creek.
12¾	*Kwongli Island,* 2¾ miles long, flat, but above level of floods. Channel on each side navigable for river steamers. Route goes N. of it. Flat cultivated foreshore on both banks.
14¼	**Ch'eung-li,** village at mouth of affluent on r.

miles	
15	**Kwongli,** P., small town on r. Route turns l. General direction SW.
17½	**T'au-k'ai,** large village with pagoda on l. First Bar, with 6 ft. of water at low river on S. side. River 1 mile wide.
18	Creek with small village of **Lok-yum** at its mouth on r. Bridge over creek with stone piers and wooden roadway. Swampy cultivation between here and **Howlik,** only passable along narrow, ill-kept bunds. River bends further S. and grows narrower.
	About 2 miles distant on r. are the *Teng-wu* mountains, with a great Buddhist monastery, the *Hing-wan-sze,* accommodating 300 priests. Behind the monastery is a peak 2,000 ft. high, commanding an extensive view. Between these mountains and the northern wall of the Shiuhing Gorge stretches a fertile plain.
19½	**Howlik,** P., large village with likin station and shallow bridged creek on r. Passenger stage. Here begins the *Ling-yang* (Antelope) or *Shiuhing Gorge.* The river narrows to 400 yds., with steep rocky banks on both sides sloping up sharply to about 900 ft. above the river. Tow-path along the top of each bank. Grassy hills on l., partially covered with tea plantations.
23¾	Conspicuous pagoda on r., marking the upper end of the gorge. It stands on a spur of the main range, which rises to about 1,500 ft. above the river.
24¼	Joss-house on l. Creek a little further on.
24¾	**Tak-hau,** large village on r.[1] It extends along the Shiuhing road about 900 yds. inland.
25½	**Pakto W.,** P., large village and port of call on l.
26½	**Kum-tau,** village on l.
28	**Kum-tau-t'au,** village on l. Route turns r. Direction W.

[1] The Admiralty Chart marks Tak-hau on the opposite bank.

miles	
28¼	**Wong-kong-sha,** large village and pagoda on r. Sandbank, awash at low water, extending over 3 miles along bank on l.
29	Suburbs of Shiuhing, with large pagoda, on r. Pagoda standing opposite on l. River over a mile wide.
29½	Affluent comes in from **Sunhing,** P., on l. This river is navigable up to **Hotowhü,** P., a boat-building centre. Proceeding thence 8 miles across a rice plain via **Tintong,** P., the traveller reaches **Wongnai-wan,** P., the head of navigation on the Mak-yeung River, which flows past **Yeungkong,** P. T., into the sea (see Route 70).
30½	**SHIUHING,** P. T., large walled city and port of call on r. (see *Gazetteer*). About a mile N. of the city are groups of rocky pinnacles (*Ts'at-sing-ngam*) rising abruptly several hundred feet from the plain, and containing some celebrated marble caves.
32½	Salt station on r. River about 1,000 yds. wide.
33	Village on l.
33¼	Joss-house on r.
34	Temple at foot of peaked hill on r.
34½	*Tai-ting Temple* on l. Route turns r.
35¼	**Fu-wan,** village on l. Sandbank on r. General direction N.
36	**Kwai-lam,** large village on r.
37¼	**Taiwan S.,** village on l. Hills on both banks commence here.
39¾	*Siu-siang-hap,* a narrow gorge.
40½	**Lo-kong,** small village and creek on r. Route turns l. and goes W.
41½	**Tai-siang,** large village on r., with a sandbank in front of it.
44¼	Hills on both banks. Joss-house on r.
45¾	**Tai-kang,** large village on r. at the mouth of a small tributary navigable for sampans. Small pagoda ¾ mile distant on l.

miles	
46½	Village of 30 houses on r. Thick woods behind.
47¼	Bamboo plantations on l.
48¾	**Lukpo,** P., a fairly large town on r. Route makes a sharp turn to l. and goes S.
51¾	Kilns on both banks. Route turns r.
53	**Sheong-tau-yao** (50 houses) on l. Woods in the vicinity. Hills behind. Small, scattered groups of houses along the bank on r.
53½	**Sun-cheon,** small village on r.
54¼	**Shek-lung** (30 houses) on r.
55½	**Kay-cha,** village at the foot of low hills on r.
56½	Narrow island about 1,000 yds. long. Channel to l.
57¼	Tree-clad promontory on l. Route turns r. Direction W.
58	Small, scattered villages on r. Red cliffs on l.
59¾	**Doki,** P. (Tau-kai-ho), village on l.
61½	**Yütshing,** P.T., small town and passenger stage on r., at the mouth of a tributary about 50 yds. wide, navigable for small junks.
62¼	**Kong-sui,** large village a mile inland on l., on a small stream leading to the district city of **Tungon**, P., about 9 miles distant. There is also a small village close to bank. Hills on both sides of the river.
64½	**Sheong-sia-wan** (60 houses) on r.
65¼	Series of lime-kilns on l.
66¾	**Samchowhü,** P. (marked Chau-sun on Admiralty Chart), village of 50 houses on r. Another group of about 50 houses ¼ mile further W. N. lat. 23° 05′ 19·51″; E. long. 111° 57′ 49·6″. Large lime-kilns on l.
67¼	Wooded village at mouth of small creek on l.
67½	Remarkable outcrop of marble rocks, known as *Kai-kwan-shek* (Cock's Comb Rock) on r.
68½	**Lukto,** P. (80 houses) on l. Passenger stage. No stone buildings.
70	Group of small villages on r. Here the river is

miles	
	about ½ mile wide, and the banks, which are intersected by numerous small streams, are flooded in summer. Route turns r.
71	**Si-t'ong,** village on l. Direction N.
73	**Kow-kwan** and other small villages on r. Route turns l. General direction W.
75½	**Sai-yan** (Sai-yome on Admiralty Chart), village of 50 houses on r.
79	Conspicuous village on r.
80	**Chut-po-lim,** village on l.
80¼	**T'in-ho** (50 houses) and **Ma-hü,** village at the mouth of the *Ma-hü River*, which flows in from the NW., and is apparently navigable for small junks.[1]
83	Nine-storeyed pagoda on r.
83¼	**Kong-hau** or **Lo-ting-hau** (40 houses) on l. at the mouth of the *Nam Kong*, a tributary said to be navigable for sampans as far as **Lotingchow,** P. T., some 40 miles distant. Port of call.
84	High bank and cultivated country on r. Low hills on l.
85	Dry sandbank on r. stretching to the W. corner of Takhing city.
86¾	**TAKHING,** P. T., large walled city on r. (see *Gazetteer*). River about ½ mile wide. High bank on r. with houses on edge. The ground immediately N. of Takhing is very swampy. Hilly country to l.
88¼	**Ha-tip,** small village on l.
89	**Seung-tip,** small village on l. Here the river narrows to a gorge about 400 yds. wide. Steep hills on both sides. Tow-paths.
89¼	An air-line telegraph crosses the river.
90	River makes a sharp twist round steep point on l.
91	**Lang-sui** (80 houses) on l. The gorge ends here. One telegraph wire on each bank.

[1] The mouth of this river is placed 7 miles too far to the east in the Provisional and French Maps.

miles	
91¼	Small affluent on r., and, on the other side of a hill, **Yung-t'ong** (10 houses). 100 yds. further on is the village of **Wai-lung** (16 houses).
92¼	**Hong-so,** small village on l.
93¼	**Tailik,** P., village on l. Sandbank stretching for nearly 3 miles on l.
94¼	**Ti-sam,** village on l.
95	Two-storeyed stone building on l., occupied by a detachment of soldiers. Could accommodate about 50.
95¾	*Kin-sui* temple on r. Route turns l.
96¼	**Ha-lok,** small village near mouth of affluent on r. Guard-house on l.
97	*Sheong-ti* temple on l. Immediately under the temple are three rocky heads, 80 ft. from the bank, which uncover 7 ft. at low river.
97¾	**Lok-shui,** village on r. Affluent comes in from **Saining,** P., about 10 miles distant on l.
98¼	*Kum-kwo-shek* (also called *Fa-piu,* or Monk's Head), a curious mass of granite on r., rising perpendicularly some 300 ft. out of a range of hills 1,410 ft. in height. After passing this, navigation becomes dangerous, as the river-bed is studded with rocks.
99¼	**Lu-pong** (40 houses) on l. There is an extensive shoal on r., and the channel goes close to bank on l. Beyond Lu-pong is a small hill with many unusually tall fir-trees with straight stems. Though fir-trees abound, they are generally small and would be of little use as spars.
100¼	**Hau-i-tong,** large village on r. Two small tributaries. Direction NW.
101¾	Ruined pagoda on l. Likin station on r.
102¾	Wooded valley and village on l.
103¾	*Sun-sin-k'iu* (New Fairies' Bridge), a reef extending two-thirds of the way across the river from r.
104	**Dosing,** P., port of call (see *Gazetteer*) and small

miles

tributary on l. Here the river bends sharply at right angles from NW. to NE. Above Dosing for about 1½ miles is a wide cultivated plain.

107 **Tu-lok-hü,** small village and creek on r. Route turns l. and goes NNW. Hills close down to both banks.

108½ **Chongkong,** P. T., large village and creek on r. Extensive mudbanks on r. reaching as far as Fungchünyün (mile 119).

112 Second Bar : channel in midstream. *Ko-pi* joss-house on l. **Sz-p'i,** village ¼ mile from bank on r.

113¼ **Mong-chuen** (Wang-ts'un), large village on r.

114 **Pun-lung,** village on l. at the mouth of a tributary of the same name.

115 **Kuk-hü,** wooded village on r. Webster Rocks close to bank on l.

116½ Rocky foreshore on l.

118½ Mudbanks on r., cultivated in dry season.

119 **Fungchünyün,** P., district city and passenger stage on r. (see *Gazetteer*).

119¾ **Tu-hau-tsui,** village on l. at mouth of small creek. Just above, there are dangerous eddies in summer floods.

121 **Hong-tsa** (French map, Ho-ngo-tse), village on l. **Konghowhü,** P., village on r., on the N. bank of a large tributary, the *Fo Kong*, which comes from **Fuchwanhsien** and **Hohsien** in Kwangsi, and is navigable for junks for a long way. N. lat. 23° 25′ 43·95″ ; E. long. 110° 16′ 37·5″.

From Konghowhü to Wuchow banks are generally steep ; there are few houses and little cultivation.

122 Route turns l. and goes W.

123¾ *Sheong-yu* (Twin Rocks) in midstream.

Bamboo plantation on l.

Tai-wong, village on r. Wooded country on both banks. Hills 600 to 700 ft. high on r.

miles	
124¾	High bank on l.
126½	Salt station on l. Guard-boat and two joss-houses on r.
128	Red-tipped conical hill on r. Thick bamboos for several miles along bank on l.
128¼	Villages on r. and l. Boundary of Kwangtung province.
129	Village on r.
129½	White sandy beach on r. Wooded hills on l.
131	Village on r.
131½	*Ki-long* island with joss-house. Channel to r.
132¼	Foreign cemetery on r.
133	Pagoda on l. Conspicuous foreign houses on r.
133½	**WUCHOW,** P. T., walled city on r. at junction of *Fu Ho* (or *Kwei Shui*) with West River. The Fu Ho is 300 to 400 yds. wide. It can be ascended to Kweilin, the capital of Kwangsi, 300 miles away, but it is full of rapids over which boats of only some 6 in. draught can be towed with difficulty.

ROUTE 49

LOK-YUM TO TAK-HAU

Land Route (10 miles)

Authority: War Office Sketch Plan, No. 448, by Lieut. H. R. Thomas, April 1914.

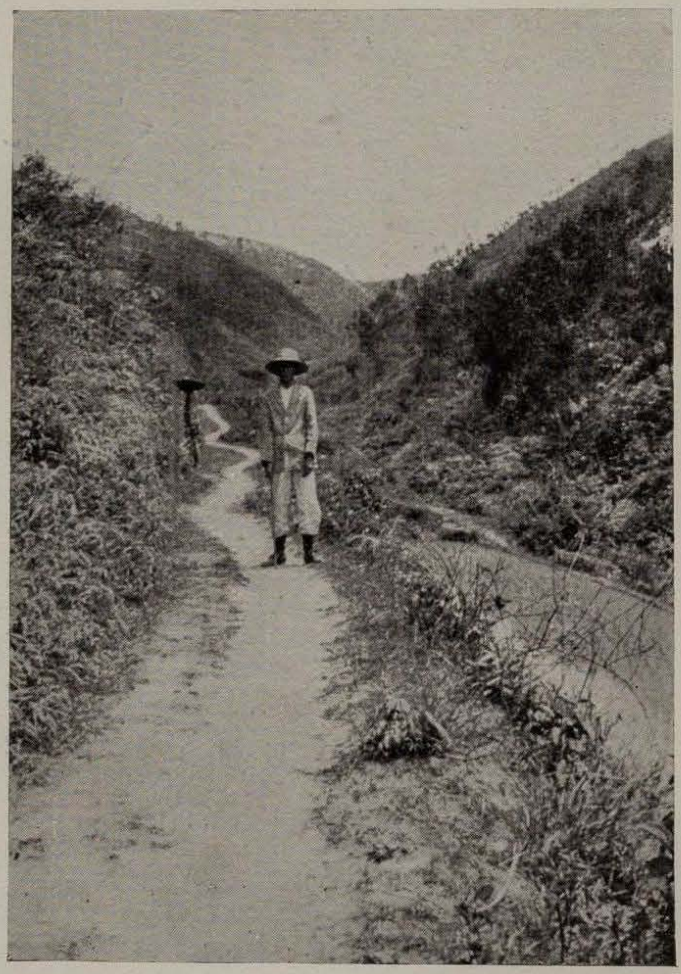
General direction SW. This route provides a means of turning the Shiuhing Gorge by a land march of about 10 miles. It proceeds a short distance up the Lok-yum Creek, then strikes across swampy cultivation through a valley between high hills, and skirting the range which forms the Shiuhing Gorge reaches Tak-hau near the bank of the West River 6¾ miles above Lok-yum.

The Lok-yum Creek dries at low river, when the Samshui tide gauge shows zero. There is no perceptible current. The creek is embanked on both sides, and has at frequent intervals wide stone steps leading down to the water. All the flat part of the valley is very swampy, but in the flood season (June to August) the valley is not flooded, owing to the dykes or embankments. These are about 10 ft. high with paths (as a rule unpaved) 5 ft. wide on top. They are generally lined with trees, sometimes on both sides. Paths along paddy bunds are bad.

The district is populous.

yards	
0	**Lok-yum,** small village on l. or N. bank of West River, 18 miles above Samshui (see Route 48, mile 18). Route starts along embankment on S. side of *Lok-yum Creek.* The other side is also embanked and planted with trees. Direction NW.
800	Route turns l., leaving embankment, and crosses swampy cultivation on a low, paved bund. An alternative would be to follow the path on the embankment for another 2,000 yds. and then a paddy bund for 600 yds. to Jo-ho. This would add ½ mile to the total distance traversed.
1,400	Stone bridge 6 ft. wide over small creek (no current). This creek does not connect with Lok-yum creek, but ends in duck ponds about ½ mile to the N.
2,100	Path on r. leading to embankment beside Lok-yum Creek.
2,600	**Jo-ho,** village. Telegraph line on wooden poles crosses route. Route turns r.
2,800	Route turns l. and follows a dyke about 10 ft. high which leaves the creek at this point. General direction S. by W. High hills covered with grass on r.
4,000	Village and wood on l.
6,200	Telegraph lines from Samshui and **Howlik** cross route, which turns l. on meeting *Howlik Creek* and

yards	
	runs along it on embankment for about 300 yds. Direction E. by S.
6,800	Bridge with stone piers and wooden roadway. The embankment continues on N. side of creek to Howlik, 2 miles distant. The creek is shallow. Route now turns r. and follows the embankment on S. side of creek in a westerly direction. There is also a very bad path from here leading more directly to **Tso-tsun** across paddy fields, but it is only about ¼ mile shorter than the path along the dyke.
7,500	Telegraph line crosses route.
8,700	Conspicuous tree at foot of hills on r. Route turns l. and goes S.
9,100	Telegraph line crosses route.
9,300	Embankment ends. Path joins on l. Two conspicuous trees on a mound 300 yds. to l. Paddy bund to
9,700	**Tso-tsun,** a long, narrow village. General direction SW.
10,500	Ruined building on l. A dyke goes off to r.
11,000	Stone bridge with two arches on r., and embankment leading to village of **Sheung-tai-chun,** ½ mile distant, along the S. side of a shallow lake measuring about 750 by 250 yds. A path also leads to **Ha-tai-chun.** Ruined huts on l. Route now follows the bank of a stream on r.
11,300	Two-arch stone bridge on r.
11,500	Pond on l., and village of **Yat-chun** just beyond.
11,700	Telegraph line crosses stream and runs alongside route on r. for the rest of the way. Paddy fields on both sides. Direction S.
13,100	Hills close to route on l.
14,200	Pond and wooded hill 100 ft. high on r.
14,500	Spur comes down from hills rising to about 1,000 ft. on l.
15,100	Route crosses a spur covered with pine-trees.



ROAD YUNG-T'ONG TO TAKHING

yards

15,600 **Lam-tong,** village at foot of spur on r. The path now runs through rice cultivation.

17,800 **Tak-hau,** village with road running along a dyke to **Shiuhing** (see Route 48, mile 24¾). West River is about ½ mile distant from this point.

ROUTE 50

TAKHING TO YUNG-T'ONG

Land Route (10 miles)

Authority: War Office Sketch Map, No. 448 (3), Lieut. H. R. Thomas, May 1914.

General direction W. by N. This short land route was mapped from a compass traverse. It describes a loop passing for the most part through valleys in rear of the hills west of Takhing. From Takhing to Sun-hü the path is not good, and lies in swampy ground. From Sun-hü onwards it has a good surface, but is narrow, being about 4 ft. wide and paved only for short distances. The villages passed are small, containing 30 houses on an average. The sides of the valleys among the foothills are steep, but the slopes of the main range are open and fairly easy. The gradient of the path is barely perceptible, and the highest point, just beyond the village of Nam-ch'ung, is 200 ft. above river level. Good water is plentiful. No wheeled transport is used. The typical bridge is made of a stone slab on rough masonry abutments, giving a roadway about 4 ft. wide.

yards

0 **TAKHING,** P. T. (see *Gazetteer*). The road runs from the NE. corner of the walls in a northerly direction, passing a shallow pond on the r. and a cemetery on the l.

1,300 Rest-house on l., behind which is a small hill. Joss-house on r.

yards	
2,150	**Long-kan,** village.
2,700	**Sun-hü,** village 200 yds. from the road on r. The road now bends round the W. side of a hill and enters a valley, skirting the foothills on l. and trending NW. over sandy ground.
4,200	Road makes a sharp bend N. and crosses a bridge.
4,500	**Chi-tsz-ch'ung,** village. Passing a ruin on l., 300 yds. beyond the village, the road bends westward. Paddy fields on r.
5,450	A path goes off NE. across the valley to **Chung-sau-t'ong** village, about 500 yds. distant.
5,800	The road divides, one path skirting the foothills on the S. side of the valley and passing through a number of villages; and the other crossing the stream which runs down from the valley and closely following its course. The stream is shallow and about 12 ft. wide; current l. to r. The route follows the latter road, which is the more direct of the two. The path beyond the bridge is embanked on l. Paddy fields on S. side of valley.
6,200	**Shan-shui,** village on r.
6,700	Another small village.
7,900	A tributary stream is crossed by a bridge.
8,300	The main stream is forded, and the road continues along the S. side on an embankment.
8,950	The stream is crossed on a bridge. From here a path leads S. through paddy cultivation to the village of **Lau-ts'un,** about $\frac{1}{4}$ mile distant. The road continues, embanked, on the N. side of the stream.
9,700	Bridge. Here the stream bends N. up a side valley, and just beyond the bridge is a path following it to the village of **Lik-ma.** The road continues in a westerly direction.
10,000	Embankment ceases.
10,900	Hamlet, from which a path leads S. to the village of **Nam-ch'ung** across the valley, 300 yds. distant.

yards	
11,200	Hamlet, with embanked path leading S. to a village across the valley.
11,600	Highest point on route : 200 ft. above level of river by aneroid.
11,900	Road now approaches a stream which runs down the valley W. and then S. to Yung-t'ong.
12,400	Bridge. Road follows r. bank of stream.
12,900	Road and stream bend sharply SW.
13,400	Rapids passed.
14,400	Stone bridge in good condition ; roadway about 4 ft. wide. Road crosses to l. bank. On r. a cultivated valley opens, and about ½ mile up it is the village of **Tai-tung.**
15,300	Stream is forded and road crosses to r. bank.
15,600	*Chü-na-shi*, rest-house. From here a path runs up the r. bank of the stream and past Tai-tung to **Fungchünyün** (see Route 48, mile 119). Paddy fields on l. of stream.
16,750	Bridge. Stream is about 150 yds. to l. and 15 ft. wide. Road bends SW. between low hills.
17,500	**Wai-lung-hü,** village on West River. Road now turns l. and runs E. along the river to Yung-t'ong.
17,800	**Yung-t'ong,** village.

ROUTE 51

WUCHOW TO NANNING

Water Route (371 miles)

Authorities : Admiralty Chart, No. 1015 ; A. R. Colquhoun, *Across Chrysê*, chaps. 12–22 ; *China Sea Pilot*, vol. iii, pp. 398–406 ; Imperial Maritime Customs, Decennial Reports, 1892–1901 : Wuchow.

General direction W. by S. From Wuchow to Nanning the Si Kiang and Yu Kiang are navigated by motor boats and cargo junks of 2 to 4 ft. draught. There are few difficulties in navi-

gation as far as Sünchow (mile 113) ; but at that place there are many banks of sand and stones, and the current, which runs about 4 knots below this point, increases sometimes to as much as 8 knots in May. The channel continues good as far as Kweihsien, which can be reached by launches drawing 5 ft. at all times of the year. From Kweihsien to Nanning there are many difficult places, the worst being the Great Rapid, and junks have to lighten to 2½ ft. at low river. The river becomes very tortuous, especially above the Great Rapid, and some 30 miles below Nanning. The water level at Nanning varies about 24 ft. between summer and winter, and there are usually three rises of over 15 ft. during the summer rains. The stream here runs with a velocity of about 2 knots at low river and 5 knots at high river.

The type of junk which plies to Nanning is a strongly-built boat 75 ft. long and 15 ft. beam ; some of them draw 5 to 6 ft. when heavily loaded. The rudder is 15 to 20 ft. long, and a bow oar is also used for steering. Their capacity is 40 to 47 tons. They are sailed or tracked upstream, and downstream sweeps are sometimes used. The time taken for the journey from Wuchow to Nanning is 25 to 27 days.

The ordinary type of motor boat on the same journey is 76 ft. long, 14 ft. beam, 3·65 ft. deep ; 1·6 ft. draught unloaded, 2·8 ft. loaded. Carrying capacity, 450 piculs (about 27 tons) and 100 passengers. Tonnage, 36. Square stern with two balanced rudders, and a bow oar for supplementary steering. Kerosene oil motor, consuming about 8 gallons per hour and giving an average speed of 9·5 knots when the launch is light, 8·5 knots loaded. Time taken from Wuchow to Nanning 6 days, from Nanning to Wuchow 3 days. The passenger stages open between these two towns are : Tengyün, Mongkong, Paima, Pingnamyün, Konghow, Sünchow, Tungtsun, Kweihsien, Hengchow, Namheung, and Wingshun.

The route lies entirely within Kwangsi province. It has not been traversed in detail, and distances have been measured from the Admiralty Chart.

miles	
0	**WUCHOW,** P. T. (see *Gazetteer*).
3	Route passes S. of *Ch'eung-chau,* a fertile island 5 m. long by 1 m. wide. The northern channel is navigable at high river only. Pagoda on l.
6	**Yunghü,** P., village on l. For the first 16 miles the river flows between two ranges of hills, the bases of which sometimes recede, leaving open spaces with patches of cultivation, chiefly mulberry. Fine clumps of bamboo grow along the banks.
7½	Island nearly 2 miles long. Channel to N
14	**Ch'ik-shui-hü,** village on l.
16	**Yong-chu-tan-sin,** village on r. Here the river narrows and winds between cliffs (*Tung-tam-hap*), rising to nearly 2,000 ft. on l. Five-storeyed pagoda on l.
18	*Yau-cha-t'an* (Oil-press Rapid) between a small island and bank on l.
20	**Jenhohü,** P., village on r. Route turns l.
24	*Hien-chau,* island 3 miles long. Channel to N.
29	Temple on l. Group of villages opposite.
32½	**Tengyün,** P. T., a small district city of 5,000 inhabitants on l., just above the mouth of a river which flows in from **Paklow** and **Junghsien Si** (see Route 82 A, miles 17, 42). There are stone steps on the river front and a five-storeyed pagoda on the opposite side of the river. The country here is open.
35½	Route turns r. and goes N. Hills about 2,000 ft. on l., 1,150 ft. on r.
37½	*Têng-chau,* small wooded island 250 ft. high at further end. Hills 2,300 ft. high on both banks.
39½	Route turns l. and goes NW.
44	Mountains 3,000 to 4,000 ft. on r.
47½	**Mongkong,** P., a small unwalled town at the junction of the **Wingonchow** river, where the hills recede slightly. West River here is 1½ miles wide. Numerous rocks and rapids.
52	Route turns r. *Wang-po-chau,* a well-cultivated

miles

island nearly 3 miles long, with several villages. Channel to S.

54 *Kau-wei-yau-t'an* (Dog's-tail Rapid), abreast Wang-po-chau, is about a mile long, with a very narrow channel between rocks and an 8-knot current when the water level at Wuchow is 28 ft. above zero. Several other rapids occur between this point and Paima (mile 60).

59 **Ta-kio-miao,** village on r. River narrows to ¼ mile. Current and eddies very strong at high river. Route makes a sharp turn to l.

60 **Paima,** P., market village with likin station on r. This is the outlet for cassia produced in the district. The country now opens out into a wide stretch of undulating land where maize and mulberry are grown. Villages are larger and more numerous.

65 **Mo-lam-hau** (Wu-lin-k'ou), village on l. at the mouth of a creek communicating with **Taiwu,** P., a market for cassia, 8 miles distant. Conspicuous white temple. Above this the country is more level, and navigation less intricate. Route makes a sharp turn to r.

69 **Tanchuk,** P., village on r., with large brick and earthenware factory. Steps leading to pagoda on l.

73 **Chang-ts'un,** village on l.

80 **Pingnamyün,** P. T., district city on r. with fine granite walls and brick ramparts. The population is normally about 5,000, but double that number on market days. The town lies in an amphitheatre enclosed by trees and clumps of bamboo. Flights of massive stone steps wind down to the river edge on either side of a creek. The chief export trade is in hides.

Above Pingnamyün the river traverses a broad plain bounded on the NW. by a range of hills known as the *Pak-shek Shan.*

miles

86 *Ku-yung-t'an*, a rapid, ¼ mile long, with a 9-knot current.

88 Route turns r. River encumbered with rocks.

90 Route turns l.

91 *Siang-seu-chau*, island on r.

93 *Fu-t'iu-t'an* (Tiger's Spring Rapid). Channel near bank on r.

95 Route turns sharply to l. and goes S.

KONGHOW, P. T. (also known as **Tai-wong**), on r., an important place at the junction of the *Tai-wong Kong*, a waterway connecting the West River with the *Pak Kong* or northern branch, which results from the confluence of the *Liu* and *Hung-shui* rivers. Likin, customs, and salt stations. Above this point the West River is generally known as the *Nam Kong* (South River) or *Yu Kong* (Right-hand River, with reference to its junction above Nanning with the *Tso Kong* or Left-hand River).

103½ *Kau-t'au-t'an* (Dog's-head Rapid).

105 **Shektsui,** P., village on l.

109½ *Yeung-lan-t'ap*, nine-storeyed polygonal pagoda in a prominent position on l. Bank on l. formed of immense tiers of stone.

111 *T'ung-ku-t'an*, rapid with many rocks and strong eddies just below the junction of the Pak Kong on r. Above this the change in colour from the dark brown water of the West River to the clear blue of the Yu Kong is very marked.

113 **SÜNCHOW,** P. T. (also known locally as **Kwai-p'ing-shing**), a walled city on r., at the fork formed by the confluence of the Yu Kong and Pak Kong. It lies at the end of a range of bare hills about 2,000 ft. high, and is partially rebuilt after its destruction during the T'ai-p'ing rebellion. The population is estimated at 30,000 to 40,000, the suburbs being larger than the town itself. It is a centre for timber

miles

trade and locally grown silk. The principal suburb is on the Yu Kong, and another is on the Pak Kong. There are likin and salt stations on both rivers, and cargo junks are fairly numerous. The surrounding country is poor, with patches of cultivation along the river, the rest being rolling downs covered with long grass and pine-trees. Villages are few and small. Some sugar is grown, and ponies are reared.

From here to Kweihsien (mile 179½) the river varies in width from 350 to 150 yds., and is very winding. It flows across a large plain between banks which at the ordinary level are about 40 ft. high. The shores are in many places rocky. General direction S.

115 *Ma-pu-t'an*, rapid between a point on l. and a reef of rocks. *Si Shan*, mountains 2 miles distant on r.

121 Route makes left-about turn.

123½ **Fuk-shan,** village on l., beyond which a remarkable rock 2,000 ft. high is visible about 5 miles to the SE. The river describes a great loop and continues to wind.

128½ **Kun-kong,** village on l.

133 **Ngau-lan,** village on r.

136 **Hawan,** P. (Hsia-wan-hsü), village on l.

137½ *Lang-t'an* (Billowy Rapid).

140 Creek on l. leading to **Ta-yang-kwan,** 5 miles up.

142½ Pagoda on r.

143½ **Paisha Si,** P., village on r.

147½ Rapids.

152½ **Tawanhü Si,** P., village on l.

154 Rapids.

156 **Fan-kai,** market village on r.

161 Three-storeyed pagoda on l.

162 **Tungtsun,** P., small town on l., situated in a well-wooded hollow. This is the principal rice market of Kwangsi, and a considerable number of junks are to be found here.

miles

169 Cluster of villages and affluent on r. From here a series of isolated rocks stretches for several miles along the bank. Sugar-cane cultivation on l.

171½ **Tung-po,** village on r.

177 Nine-storeyed pagoda on l.

178 *Pit-t'ap* (Brush Tower) on l.

179½ **KWEIHSIEN,** P. T., a walled district city of some 30,000 inhabitants on r., lying at the foot of a range of mountains. The majority of the inhabitants live in the east suburb, the chief business quarter. The southern part of the city contains one main street, running parallel to the south wall ; the northern part consists of small cottages with gardens and fruit trees. The suburbs were much damaged during the T'ai-p'ing rebellion. A flight of stone steps leads from the city gate to the water, and opposite to them is a good ancherage off the S. bank. There are two schools and a French Mission. Kweihsien is the limit of navigation at low water except for small motor boats.

The country above the city is a broken plain under cultivation with Indian corn, ground-nuts, indigo, sugar cane, and tobacco. Ox-carts and ponies are used in small numbers. There are silver mines in the vicinity.

The river continues to flow between high banks.

184 *Miao-mên-t'an* (Temple Gate Rapid).

190½ *Kwa-t'an,* rapids which, like the Miao-mên-t'an, can at low river be passed only by boats. Three signal stations on l.

197 *Ta-yin-t'an,* rapid, at a point where the route makes a right-about turn.

Wa-t'ong-hü, village on l., above which the river flows through a valley with low hills on N. and hills about 1,500 ft. high at the distance of a mile on S.

199 *Ta-ki-t'an,* rapid at the entrance to the Ngan-pai

miles

Gorge, where the river is suddenly contracted to 200 yds. by low ranges of hills on each side. Depth of 3 ft. at low river.

201 Route makes a left-about turn and goes S.

203 **Hong-kong-hü,** small village with conspicuous temple on l.

205 *Tai-po-t'an,* rapid about ½ mile long.

206 Hills over 2,000 ft. high reach river on l.

207 Affluent about 100 yds. wide comes in on l.

207½ **Tai-ling-hü,** village on r.

208½ Affluent on r.

212 **Lau-kung-hü,** village on r. at the mouth of a creek.

213 *Fuk-po-tseung-kwan-t'an* (Rapid of the Wave-quelling General), usually known as Great Rapid. This is really a series of three rapids, the most dangerous on the river, extending over nearly 3 miles. For the first 2 miles the channel is close to the bank on r., till abreast of the upper end of *Tsing-chao-chau,* a small island. It then turns off this bank for 300 yds. and passes between two rocks about 40 ft. apart, when it makes a sharp turn to r. and crosses the second and worst rapid (*Nai-pik-t'an*) close to the north bank. Thence the channel is in midstream, and crosses the third rapid rather towards the bank on l. Just above the second rapid on r. is a fine temple standing on a rocky bluff in a grove of firs. Beyond the range forming the gorge is a wide, open plain, with maize cultivation, and mountains in the distance.

Great Rapid improves with a rise of the river, but is always a great obstacle to navigation.

217½ **T'an-t'au-ts'un,** village on r. at the mouth of an affluent. Route turns sharply to l., and goes S. In the next 8 miles there are several minor rapids.

221 **P'ing-fuk,** village on l.

222 *Ts'at-sing-ngam* (Cave of the Seven Stars) on l.

miles

224 **Sz-kun-po,** village on l. (see Route 80). Between here and Hengchow the river winds continually through a broken, undulating plain, where rice and Indian corn are grown.

230 **Chê-hü,** village on r.

236 **Lo-yeung-shi,** village on l.

245 Telegraph line from Pakhoi crosses river.

247 **HENGCHOW,** P. T., small walled town on r., situated on a sharp bend of the river, which is here about 400 yds. wide. The business suburb along the river is built on a stone-faced wall which protects it against floods. There is good anchorage off the S. bank, opposite the main steps of the town. The country above Hengchow is hilly, the river flowing between two ranges of moderate height, covered with trees and much vegetation. There are numerous islands in the river, which here widens greatly.

249 *Sam-chau-t'an* (Three Islands Rapid), or *Sam-shap-li-ch'eung-t'an* (30 Li Long Rapid), is a maze of rocks about 8½ miles long, but fairly easy to navigate. The channel is close to the bank on l. Bamboos on islands and at foot of hills by river side. General direction W.

259 Ruined pagoda on l. **Mi-pu,** village on r.

Route makes a sharp turn to l. and goes S.

Country of a more open character.

262 *San-men-t'an* (Three Gate Rapid).

264 **Namheung,** P., large village with likin station at bend of river on l. An old trade route runs from here to **Lingshan,** P. T. (see *Gazetteer*), and thence to **Yamchow,** P. T. (see *Gazetteer*), and also to **Limchowfu** and **Pakhoi** (see Route 83). The distance from Namheung to Pakhoi is about 85 miles as the crow flies. Route turns r., and river becomes less tortuous.

266 Hilly country recommences, and continues as far as Shun-on-hü (mile 294).

miles

271 **Sha-p'ing-kong-hau** (marked Ping-tang on Admiralty Chart), village on l. at the mouth of an affluent coming from the direction of Lingshan, by which some trade is carried on with Pakhoi.

279 **Fei-lung-hü** and **Fo-yin-kok,** villages on l. at a sharp bend of the river.

Shap-yi-lo-san, village on a bluff on the opposite bank. On E. side of bluff the bank is built up in irregular terraces, with good stone steps from the water's edge. Stream nearly ¾ mile wide.

Route makes a double turn to r. and goes NW. Dangerous rocks on l. Country densely wooded in many places for the next 12 miles.

Many rapids between here and Wingshun.

286 **P'ing-lang-hü,** village on l. River narrows.

Route turns r. and goes N.

293 Creek with stone bridge on l.

294 **Shun-on-hü,** village on l. Beyond this the banks are high; country abounding in hillocks and barren-looking.

297 **Ta-wang-miao,** village on r. Short rapid with very strong current.

299½ **Ko-ts'ün,** large well-built village on l.

302 **Wingshun,** P. T., district city and likin station on l., at the apex formed by a sharp left-about turn of the river. Just below it is a seven-storeyed pagoda, and in the town is a conspicuous red Confucian temple. A little further on a fine old wall with a watch-tower stands on a cliff overhanging the river. There is good anchorage close to the bank S. of the town. Sugar cane is cultivated in the district, and a little gold is washed in the river.

310 Route turns l. and goes comparatively straight in a westerly direction for about 22 miles. The country now becomes very bare and wild. Low hills on l. Mountains 2,000 ft. high close to bank

miles

on r. River narrow, with rocky banks. Villages are few.

318 **Ling-li,** village on both banks. Coal is found in this district.

320 **Man-tau-ts'un,** village on r. Good anchorage at both of these villages.

328 **Ch'ong-t'ong,** village on l.

332 Route makes a sharp turn to l.

336 **Tsam-pan-hü,** village on r. Hills about 1,650 ft. high ¾ mile to l. Curiously shaped rock.

339½ **Pak-tai-ngam,** village in group of fine trees and bamboos at the base of hills on l. Just below the village a temple stands on the crest of a precipitous bluff.

Route makes right-about turn. River flows swiftly between high rocky banks. Country broken and uneven.

341½ Route makes left-about turn.

345 **Pumiao,** P., large village amidst trees on l. Route makes right-about turn.

346 *Pak-chik Kong*, affluent on l.

349 **Ping-tan,** village on r. *Fan-t'an*, rapid with dangerous reef of rocks in midstream. At low river there is only a channel about 100 ft. wide on S. side.

350 **Tsin-to,** village on r. Route turns l.

354 Mountains rising to about 2,300 ft. on r. On one of the peaks is an octagonal seven-storeyed pagoda.

356 **Liangking,** P., village on l.

358 **Chwong-chong-hü,** village with good anchorage on l. Route turns r.

359 **Kong-wa-hü,** village on l., with two sandy islands opposite. A land route goes off from here to Yam-chow (see Route 86, mile 103).

362 Conspicuous seven-storeyed pagoda on r. Close by is a handsome Buddhist monastery amidst trees on the precipitous side of a hill. A footpath runs from just

miles

above the pagoda to Nanning, about 3 miles distant ; the river, which is very winding, takes about 9 miles. Here the character of the country completely changes. The hills disappear, and the river winds through almost level grassland between sloping, beautifully wooded banks, with several villages here and there.

366 Route makes a right-about turn.

370 **T'ing-tsz-hü,** village on l.

371 **NANNING,** P. T., on r. The treaty port of Nanning, a trading city of great antiquity, is situated in the midst of a large fertile plain. Its walls, which were rebuilt in 1741, are 3,000 yds. long, 25 to 33 ft. high, and 25 ft. thick at the base. They are made of earth faced with brick, and run for 900 yds. along the concave side of a bend in the river. The streets are paved with stone and have a clean appearance. The houses are chiefly of plain brick and one storey high. At either side of the city suburbs extend along the river, that on the west side containing the principal business quarter. Nanning was opened to foreign trade on Jan. 1, 1907, and a settlement was allotted below the eastern suburb, about a mile from the city. The land has been drained, and a bund of 1,300 ft. constructed, but the settlement has not been occupied, the foreign Powers objecting to the Chinese restrictions with regard to residence. A large village stretches along the opposite bank of the river, and the shore is lined with fishing and market boats. The city itself stands 40 ft. above low river level, but the suburbs are liable to inundation.

According to the census of 1910, the population of the town was 36,542, and that of the prefecture 677,241. There is a French Roman Catholic Mission ; and the French cathedral and the city gates are among the most conspicuous buildings. There is a good anchorage abreast the foreign settlement.

miles

Nanning has an Electric Lighting Company, and the local manufactures include leather, tobacco, fire crackers, brasswork, glass, and paper. The chief agricultural products of the neighbourhood are rice, beans, maize, and aniseed. Some coal of poor quality, sulphur, and saltpetre are mined locally. The chief exports are aniseed, sugar, beans, medicines, leather, hides, and ground-nut cake. Wood is floated down the river.

Telegraph lines run to Kweilin, Wuchow, Lungchow, and Poseh. There is considerable launch and junk traffic with the three last-named places, about 15 motor launches being engaged. The main trade routes to the coast, which have lost much of their importance since the opening of the river, run to Pakhoi via Namheung and Limchowfu, and to Yamchow via Siutung (see Routes 83 and 86).

ROUTE 52

CANTON TO KONGMOON

Water Route (54 miles)

Authorities: *China Sea Pilot*, vol. iii.; Admiralty Charts, nos. 2562, 3588; Sketch map of the Chu-Kiang by Thomas Marsh Brown.

General direction S. by W. This route, from Blenheim Passage into the West River, via Hamilton Creek, Chanchuen, Brickkiln Creek, Laklow and Kumchuk, is navigable for vessels up to 170 ft. in length, with about 26 ft. beam and a draught of 4 ft. It is the shortest route available throughout the year, and is much used by small trading craft.

Between Blenheim Passage and Tamchow Channel the ebb stream sets to the eastward, and the flood to the westward. West of Tamchow Channel the current usually runs towards the Canton River; but occasionally in winter, when

the West River is low, it may run in the opposite direction; this is caused by a high flood tide at springs. Sometimes during summer vessels cannot steam up the Kumchuk rapids and are obliged to go round by the Mahning Junction Canal.

The district traversed by the route, especially SW. of Chanchuen, is noted for its extensive mulberry cultivation and the manufacture of fine raw silk in large quantities.

The canals are generally embanked, though the land here is above high water level. Most of these embankments have a paved path about 6 ft. wide running along the top for foot passengers. Nearly all transport, however, is done by water.

miles	
0	**CANTON,** P. T. RS. Route leaves Shameen and goes SSE.
1	*Bird's Nest Fort* on l.
1¾	Mound with cedar-trees on l.
2½	*Macao Fort* and pagoda on an islet on r. *Collinson Creek* (dry at low water) just beyond.
3½	*Sepoy Island* on l.
4	*Fatshan Branch* comes in on r. Route rounds *Barrow Island* and goes SE.
5	Narrow channel between Barrow and Haddington Islands on l.
6	*Taishek Barrier,* with channel through it 400 ft. wide on the N. shore of the river.
6¼	Route turns r. up *Hamilton Creek* (Tai-shek-t'ung). General direction SW.
6½	**Taishek,** P., village on l.
7	Fishing stakes on l.
8¼	Creek on r. connecting with Fatshan Branch.
8½	*Smith Mound* (about 130 ft. high) on l.
8¾	Route turns l.
9¾	Route turns r. Joss-house and small creek on l. The waterway is now known as *Chanchuen Creek*; it is narrow and winding, but there is a least depth of 4 ft. in its fairway at low water. It runs through flat, cultivated country, and its banks are very low.

miles	
	There is always a large amount of traffic on its waters, and vessels should stop when passing other craft.
10¼	Creek on r. connecting with Fatshan Branch. Route bends round to l. General direction S.
10½	Creek on r. with stone barrier projecting 12 ft. near its mouth.
10¾	**Shekpik,** P., village on l. Small creek on r.
11	Stone steps on l.
11½	Village on r.
12½	*Fu-lu-kong Creek* branches off on l. This is one of the channels through which Chinese launches towing large flats proceed from Tamchow Channel to Blenheim Passage when the water does not admit of Chanchuen Creek being used.
13¼	Creek and village on r.
13½	Stone steps on l. Bank protected for next ¾ mile by groynes about 100 yds. apart.
14¼	Jetty on r. About 100 yds. further on is a sandbank extending abreast a small village on l.
15½	Creek on l. Route turns sharply to r.
16	Route turns l. and enters *Chanchuen Channel,* which is comparatively broad and tidal, passing between a small island and a pagoda on l. On the r. bank, on the other side of the island, lies the large town of **CHANCHUEN,** P. T. (see *Gazetteer*), with the village of **Pik-kong** opposite on the S. bank. This region is noted for the manufacture of joss-paper.
16¾	Jetty on l. Mudbank. Channel to r.
17¼	Joss-house on r. Creek on l.
17½	Village on r.
18	Scattered houses, and hills (*Tai-wu-kong*) rising to 660 ft. on l.
18¾	Route turns sharply r. into a narrow creek generally full of small craft. **Tzenaiheung,** P., on l. General direction W.

miles	
19	Stone barrier extending from bank on r. to mid-stream. There is some difficulty in rounding this barrier, as a bend in the creek allows very little room.
19¼	**Ho-kau,** village on r.
19¾	Route crosses *Tamchow Channel* and continues W. up *Brick-kiln Creek* (Chün-yiu-yung), which is broad and tidal, with a rise of 4 to 5 ft. except when the upper rivers are in flood. The current usually flows eastward.
21¼	Village on l.
22½	Small village on r.
23¼	Large village amidst mulberry cultivation on l.
24½	**Wonglin,** P., village at the mouth of a creek on l. leading to **Taileung,** P. T. (Shun-tak), about 5 miles distant. Scattered houses and mulberry plantations extending along the bank.
27¼	Route turns l. and goes S.
28	Island with kiln. Route goes to l.
28¾	Route turns l. into *Laklow Creek*, the entrance to which is unnoticeable, and is only indicated by a small joss-house and tree on its western bank. The current always runs northward in summer, the velocity being at least 4 knots, and in winter 2 to 3 knots. The channel is intricate, and there are numerous rafts, junks, launches towing passenger junks, and small craft to avoid. Proceeding southward against the current is easy, but slow speed round the turns is necessary.
29¼	Pagoda and creek on l. Route makes a sharp turn to r. and goes SW. through the town of **LAKLOW,** P., which extends for over a mile along both banks.
30½	Route turns l. Creek on r.
30¾	Route turns r.
31¼	Route turns l.
31½	Route turns r. into *Kumchuk Creek.*
	General direction SW. Scattered houses on r.

miles	
33¼	Route turns r. Creek on l.
33¾	Kilns on both banks.
34¼	Route turns l. Small villages on r.
34¾	Steep bank on l.
35	Stone steps on l.
35¼	Joss-house and small creek on l.
36	Creek on l. Telegraph line crosses river.
36½	**KUMCHUK,** P., large town on r. (see *Gazetteer*). Low hills on both banks. The creek narrows near its junction with the West River, and across its mouth lies a ridge of rocks, leaving a channel only about 75 yds. wide.
37¼	Rapid formed by the rush of water from the West River. In summer, at times when the West River is high and it is low water in the delta, the rate of the current is about 10 knots, and to stem it a speed of at least 13 knots is necessary; sometimes the passage is impossible. The rapid is short, and dangerous only from the rocks in it. The course to be steered is practically in midstream.
37½	Route turns l. down West River, passing *Fa-chiau Island* on r. General direction S.
38	Telegraph crosses river.
39½	*Junction Channel* goes off on l. *Staunch Island*, just below, is small, and so low that it is covered at 15 ft. above low river. Wooded hills on r.
43	*Sam-neung-miu* (Temple of Three Women) on r.
44½	*Chü-t'au-shan* ('Pig's Head', also called Plover Island) is about 40 ft. high with a conspicuous house on it. Channel to l.
45	*Sandpiper Creek* goes off on l., rejoining West River near SE. extremity of *Ch'iu-lin Island*.
46½	Wharf and house on l.
47	**Chowkün,** P., village with stone pier on r.
48½	*Ch'iu-lin* (or *Chau-lin*) *Island*, about 4 by 2 miles, well wooded. Main stream goes to l., present route to r.

miles	
48¾	**Ho-kau,** village on r. Fishing stakes.
51½	Mulberry cultivation on r. Paddy fields further inland.
	Pak-shek, village ¼ mile away from bank on r. River widens.
52	Custom-house and terminus of Sunning Ry.
52¼	Route turns r. up *Kongmoon Creek,* which is shallow, cargo being transhipped from steamers and junks into boats for conveyance to the town of Kongmoon.
52¾	Likin station on l. Bank on r. lined with timber and bamboo rafts, extending nearly halfway across the fairway. Highly cultivated land on l.
53¼	Route takes a right-angled turn to l., passing mouth of a creek and a fort on r.
54	**KONGMOON,** P. T. RS. (see *Gazetteer*). Large numbers of junks and sampans lie abreast the town.

ROUTE 53

KONGMOON TO YEUNGKONG

Water and Land Route (105 miles)

Authorities: B. C. Henry, *Ling-Nam,* chap. iv; Maritime Customs Decennial Reports, 1902–11; Admiralty Chart, No. 2562; War Office Provisional Map of the Province of Kuang-tung (1911); Chinese Map of Kwangtung, 1879.

General direction WSW. This route ascends practically the whole course of the Tam-kong River to its extreme limit of navigability just above Yanping, then follows a post road south to Nalung, and continues, again by water, to Yeungkong, an important town on the Mak-yeung River not far from the sea.

The country between Kongmoon and Chikhom is generally flat, fertile, and densely populated. A number of flourishing

towns and villages line the banks of the Tam Kong River for some 40 miles, after which hilly country is traversed and the population becomes much more scarce.

The Sunning Railway runs from Kongmoon to Sunwui, and then along the north bank of the Tam-kong as far as Ngauwan (mile 25), where it crosses to the south bank and continues to Kungyifow.

The principal industries are palm-leaf manufacture in the Sunwui district, camphor wood further south, coal-mining in the neighbourhood of Yanping, and sugar in the Mak-yeung basin.

The route has not been traversed in detail, and distances are approximate only.

miles	
0	**KONGMOON,** P. T. RS. The route starts from the native Custom House in the centre of the city, and goes SW.
1	A creek flowing to the *Ngaimoon* branches off on l. Timber rafts along bank on r. 300 yds. further on the route makes a sharp bend to r. and l. *Man-mo-miu,* temple on l.
2	Another sharp turn to r. and l. Guard station and creek on r. General direction S.
3	Creek on r.
5	Guard station. Creek turns l. and then r.
6	Two creeks on l.
8	**SUNWUI,** P. RS., centre of the palm-leaf fan industry (see *Gazetteer*). Conspicuous pagoda on hill. NW. of the city is a fine group of hills with two lofty peaks, *Kwai-fung* and *Wan-fung.* A well-paved road, lined with a succession of large villages, runs from Kongmoon to Sunwui, amidst orchards of oranges and papayas.
10	Route turns r. up the *Tam Kong* or *Sunchong River.* Low marshy banks without a tow-path. General direction W.
13	**Sui-tsak,** village on r.

miles	
19	Route turns l. **Tatseh,** P. RS., village on r.
25	**Ngauwan,** P., town on l. Here the Sunning Ry. train-ferry crosses the river, which is ¼ mile wide and 6 fathoms deep in mid-channel, with a rise and fall of 6 ft. at spring tides. Current, 1½ knots.
29	Creek on r. leading to **Hotsuen,** P.
31	**Tanshuihow,** P., at the mouth of a creek on r. Route bends l.
33	**Kungyifow,** P. RS. (old terminus of Sunning Ry.), on l. (see *Gazetteer*).
34	**Kam-shan-hü,** P., and creek on r.
39	**SUNCHONG,** P. T., large town at the mouth of a tributary, the *Sunning River,* on l. (see *Gazetteer*).
40	**Chongshatong,** P., on r., and **Tikhoi,** P., on l. Up to this point the least depth of water in the Tam-kong is 5 ft. It now becomes shoal, being split up by islands into various branches. One leads N. to **Hoiping,** P., about 7 miles distant, while another goes S. to **Paksha,** P. The present route continues along the main stream in a general WNW. direction.
43	**CHIKHOM,** P., an important town on r. (see *Gazetteer*). The population of this district is very dense. From the top of Centipede Hill, opposite Chikhom, it is said that no fewer than 350 villages can be seen. Further on the country becomes mountainous; the hills are all bleak and barren.
65	**YANPING,** P. T. From the head of navigation above this city a post road leads S. over a dividing ridge to
77	**Nalung,** P. The remainder of the journey is done by boat down a tributary of the *Mak-yeung* (or *Han-yang*) *River.*
105	**YEUNGKONG,** P. T., a busy centre of trade about 10 miles from the sea (see *Gazetteer*).

NORTH KWANGTUNG

ROUTE 54

CANTON TO WONGSHEK

LAND ROUTE (87¼ miles)

Authorities: Lt.-Col. G. Pereira, Jan. 1907; War Office map of Yut Han Railway, no. 337 (1908), and no. 364 (1909); Sketch map of lines Canton to Yuen-tam (1903); Chinese map of Kwangtung, 1879.

General direction N. Few people travel overland to Yingtak; there is therefore difficulty in hiring coolies at Tsingyün. The inns on this route are either very dirty or very poor, and those at Tsingyün are quite unfit for Europeans.

The country is undulating or flat for the first 32 miles, and then crosses a hilly stretch, surmounting the Hsi-ying-yen-chüeh Shan, a rise of 1,190 ft. After mile 50, the route is more level, and continues so to Wongshek. The route as a whole is only suitable for infantry. Distances are reckoned by stages, called *t'ang*. A *t'ang* is about 10 *li* (3 miles).

The Canton-Hankow Railway runs to the left of the route and nearly parallel to it for the first 50 miles. At Tailin the route crosses the railway, which continues in a northerly direction, meeting the North River at Pakonghow and following its left bank to Wongshek Railway Station.

Place-names in Mandarin (Wade transliteration) are marked (M).

miles	
0	**CANTON,** P. T. RS. (Shameen). Leaving the British Consulate and crossing the bridge from the Settlement, the route leads N. through the crowded west suburb of Canton for 2½ miles. Then across slightly undulating country with paddy fields on level

miles

ground, and grass and some tombs on higher ground, occasionally along a narrow plain. On leaving Canton, there are grassy hills, 200 ft. high, to the r., which gradually increase in height and recede from the road.

For the first 7 miles the route follows a paved road 3 to 4 ft. wide, with 3 rows of paving-stones, the outer row sometimes in a state of partial collapse, and crosses one or two low hills, where there are steps. From mile 7 along an uneven path, varying in width from 1 to 3 ft. Villages surrounded by trees are numerous all the way. Some orchards. Three small stone bridges over streams. Cows and water buffalo plentiful.

$2\frac{1}{2}$ 5-storeyed pagoda and Canton city wall on r.

4 **Sam-yun** (300 houses).

$6\frac{1}{2}$ *Hsiao-kuang-miao* (M.), temple 200 yds. to r.

7 **Fa-lien-hsi** (M.) (20 houses).

$7\frac{1}{2}$ Shektsing Arsenal 1 mile to W.

$9\frac{1}{2}$ Route turns NW.

10 **San-kuan-ch'iao** (M.) (20 houses). Route turns N. Country watered by wells.

$11\frac{1}{2}$ Forward bearing 350°.

$12\frac{3}{4}$ *Kongtsun* (or *Tsungfa*) *River* $\frac{1}{2}$ mile to r. Forward bearing 325° through 100-ft. hills.

$13\frac{1}{4}$ Across a sandy belt 50 yds. wide, and ferry over Kongtsun River (also called *Tung-hoi Ho*), 50 yds. wide, 5 ft. deep, sandy bed, which flows W. into the Paknai River, about $5\frac{1}{2}$ miles distant. (See Route 37, mile $11\frac{1}{4}$). Clear Water. Large number of boats.

$13\frac{3}{4}$ **Kongtsun,** P. RS., a busy town, with **Kotong**, P. a market town $\frac{1}{2}$ mile to l. on same bank, and a group of low hills on r. The two are said to contain over 2,000 houses. Canton-Hankow Ry. crosses the river between them.

From here to Fuk-on-shi (mile 20), the route

miles

crosses a fertile rice plain, running 10 to 20 miles eastwards and extending N. It is watered by numerous wells (few or no streams) conspicuous by their poles, to which is attached a cross-piece with a third piece which is lowered with the bucket. A good many villages all surrounded by bamboo, fir, &c. Wheelbarrows fairly numerous. Mostly good 4ft. path, raised above plain, uneven in parts. Leaving Kong-tsun, route leads N.

15½ **Pak-shui-t'ong** (20 houses). Forward bearing 25°. Route skirts 50-ft. hills on l. for a mile ; they then recede and are 1 mile distant. High hills to WNW. about 10 miles distant.

18¼ Forward bearing 10°.

19¾ Forward bearing 340°.

20 **Fuk-on-shi** (20 houses) in a mud-walled compound. Village ½ mile to NE. From here to Leunglunghü (mile 29½) there is a very good 4-ft. path (unpaved) across the rice plain ; stone bridges span the small streams crossed. Fewer wells. Villages very numerous. There are many wheelbarrows in this district.

Leaving Fuk-on-shi, ground undulating. Forward bearing 40°.

20¾ Again on plain. A few 50-ft. hills on l. which gradually become continuous at a distance of about a mile.

22¾ **Lungtam**, P. (200 to 300 houses). Direction N.

23¼ Low hills a mile or two to r. Forward bearing 10°.

25 **Hsiao-pan** (M.) (100 houses).

26 **P'ing-shan-ts'ün** (20 houses).

28 **P'ing-shan-hü** (100 houses, with some shops).

28¾ Undulating country to l.

29½ **Leunglunghü**, P. (200 houses). Forward bearing 330°. Route leaves road going N. to **Fayünshing** on r., and follows a good 4-ft. unpaved road, mostly across rice plain, undulating occasionally.

miles	
30¾	**Ku-ts'ün** (100 houses) on r. Route passes some small plantations with trees and undergrowth.
32	Route leaves plain and goes along valleys or over 50-ft. hills. 2-ft. path.
32¾	**Mêng-hsiung-yu-ts'un** (M.), marked Mung-tung-ts'ün on Chinese map (50 houses).
34	**Tsap-yin-chong,** village. Country more sandy, less rice, some potato terraces. Hills sandy or grass; more fir.
35	Forward bearing 320°. Wilder, no crops. Nullahs near road. Easy ascent.
35½	Top of small pass. Gradual descent, drop of 150 ft. Good road down.
35¾	Bearing 340° to mile 38½. Along a rice valley between low hills.
36½	**Fuk-yun-shui** (100 houses, with a Protestant mission station).
37¾	Route ascends the *Hsi-ying-jên-chüeh Shan* (M.). Undergrowth shrub and some fir. Good but steep road till near top, when rocky and bad.
38½	Top of pass: 1,190 ft. rise (1,440 ft. above sea-level). Then slight drop and rise.
38¾	From a peak 1,840 ft. high on r. there is a good view over hilly country to N. and W. Descent among hills covered with undergrowth, shrub and fir, with occasional rice-terraces. Narrow path, often rocky. Route leads W. for 600 yds., then winds NW.
40¼	**Ten-chuk-pa** (20 houses), 410 ft. above sea-level. Gradual rise between high hills covered with shrub and undergrowth. Very rocky footpath. Forward bearing 340°.
41½	750 ft. above sea-level. Route descends between high hills for the rest of the way to Ch'ih-hang (mile 45).
43	Forward bearing 350°.
43½	**Mêng-t'ien** (M.) (20 houses). Route follows a clear stream, along a good 2 to 3 ft. path.

miles

43¾ Hills well wooded. Direction NW.

45 **Ch'ih-hang** (M.) (52 houses), 430 ft. above sea-level.

From here to Tsingyün the route leads for the first 5¾ miles among hills, which then open out to a plain, chiefly rice. Soil often sandy. Villages plentiful on the plain, often hidden by bamboo and trees. Road very good in parts, only paved for a short way. A good many farm carts on the plain ; they are two-wheeled and drawn by a water-buffalo. Body of cart is like a ladder ; solid wooden wheels.

Leaving Ch'ih-hang, route goes down a valley alongside a stream, between 200 to 500-ft. hills with some shrub and undergrowth. Forward bearing 285°.

46¼ Route leaves stream, but still goes up and down narrow valleys.

47 Belt of cultivation, 70 yds. wide, in valley.

47¾ Forward bearing 340°.

48½ Hills lower, valley widens High hills to N. running NE.

49¾ Route leads N. over 50-ft. hill to small plain ; good unpaved 4 ft. road.

50¾ Route crosses Canton–Hankow Ry. **Ying-tsui,** RS. about a mile to r.

Tailin, P. (200 houses, with shops). Forward bearing 335°. From here onwards a good many farm carts were seen.

52½ Forward bearing 300°. Plain 2 or 3 miles wide, sandy soil, sugar-cane cultivation. Many flocks of tame geese.

53¾ Road paved for a short way, and now mostly no longer good.

Fêng-t'ou-miao (M.), temple on 300-ft. grass hill on r. Plain opens out with many villages, which are often hidden by bamboo and trees.

55½ Ferry over stream 30 to 40 yds. wide, 3 ft. deep, sandy bed, 20-ft. banks, lined by bamboo and trees.

miles

Nan-ch'êng-ti (M.), village. Path unpaved.

57½ **Chowsin,** P. (500 houses) on l. bank of North River. Bearing to Tsingyün 290°. Two-strand telegraph near road.

Route now lies near l. bank of North River, partly along an embankment 20 ft. high, and partly path across fields. Plain intersected by low hills.

60½ Cross sandy bed 40 yds. wide.

61¾ Descend 20-ft. bank and ferry over North River, which is here about 200 yds. wide ; clear water, many boats.

62½ **TSINGYÜN,** P. T., walled district city along r. bank of North River. (For description, see *Gazetteer.*) There are French Catholic and German Protestant Mission stations, but no resident Europeans.

From here to Wongshek the route is an unpaved footpath, which after mile 79¼ is mostly a towing-path along the North River. Path is narrow, especially along the river bank. As far as mile 79½, the route leads across narrow plains or among low hills with some fir and shrub, with high hills in background. Villages usually plentiful, often hidden by bamboo and trees. The higher hills are grass-covered and treeless, the lower hills near the river often terraced for cultivation. A few small streams are crossed by stone bridges. Farm carts and wheelbarrows are plentiful in places. Crops mostly rice with some potatoes and sugar-cane. Towing-path crosses small streams by stone arch bridges or wooden planks. Large sandbanks run out from banks into the North River.

Leaving Tsingyün by East gate, road bears 60° across undulating plain 1 to 2 miles wide, bordered by North River on r. and low foot-hills on l., with high hills in background.

64½ Forward bearing 35°. Plain now flat.

miles

65½ **Chong-ya-ling,** village. Now along rice valleys ½ to 1 mile wide, between 50 to 300-ft. hills.

66¼ **Chiu-ts'ai-ling** (M.) (20 houses), with *Pi-chia Shan* (M.) and *Ta-mao Shan* (M,), 3,000 to 5,000 ft. high, on l. Forward bearing 70°.

67½ **Howkonghü,** P., village, with Ta-mao Shan 1 mile to l., 300-ft. hills 1 mile to r.

68¾ Over 50-ft. pass, and E. across a rice plain.

70½ Cross the *T'an-ch'iao* (M.), a stone bridge on 10 piers over a small stream. *Fi-loi Shan* to ESE. and *Wu-ching-lung Shan* (M.) to N., about 5 miles from each other, and from 3,000 to 5,000 ft. high.

73 **Kong-pu-hü** (80 houses).

74½ Over a 100-ft. hill near Fi-loi Shan on r. Villages numerous, with crops and sugar-cane on lower ground. Forward bearing 80°.

77¼ Direction E, across plain.

78½ Forward bearing 80°.

78¾ **Wo-t'ang-kang** (M.) (30 houses), with a pond. Forward bearing 65°. North River a short way to r.

79¼ Along narrow towing-path, 30 ft. above North River. Forward bearing 25°. Belt of cultivation or low hills.

80¾ **Pak-hok-sun** (20 houses) on North River (see Route 55, mile 69). Route lies along towing-path.

82¼ Forward bearing 50°.

83¾ 20-ft. drop and rise crossing a stream, 30 ft. wide, by a plank bridge, to village of **Wong-tung-hau.**

84 Route leaves towing-path and crosses level belt given up to crops and bamboo plantations.

84¼ Direction N. High hill in background N. by E.

85¾ Again on towing-path ; sandbound bamboo-covered island on r.

86¾ Forward bearing 20°.

87¼ **Wongshek,** P. RS. (over 300 houses) on r. bank of North River. Ry. station 1 mile away on the opposite bank. The people here are said to be very anti-foreign.

ROUTE 55

SAMSHUI TO WONGSHEK

Water Route (75½ miles)

Authorities: Lieut. R. M. Crosse, Aug. 1909; War Office MS. map no. 200 (1); Admiralty Chart 3218 (1913); *China Sea Pilot*, vol. iii; Chinese map of Kwangtung, 1879.

General direction, N. by E. From Samshui to Sha-cheung (mile 45¾), the banks of the river are sloping, and landing would be easy. At Sha-cheung they become steep, the average height being from 15 to 20 ft. above water.

From Sha-cheung to Tsingyün (mile 51½), the country is generally flat, populous, and cultivated. No villages, however, appear on the river bank. Between miles 62 and 66 is the Fi-loi-sze Gorge, after which the country opens out again and is well-wooded.

A considerable amount of hard black stone of excellent quality is quarried in the gorge, and taken in junks down the river.

The average breadth of the river, except where islands occur as far as Tsingyün, is about ¾ mile. After Tsingyün, it is free of islands, and averages ½ mile in width except in the Fi-loi-sze Gorge, where it narrows to about 300 yds.

The current at low water varies between 1 and 1½ knots. The depth is very variable, but offers little difficulty to vessels up to 3 ft. draught. When in flood the river rises very rapidly.

Distances are taken mostly from the Admiralty Chart, and must be regarded as approximate only.

miles	
0	**SAMSHUI,** P. T. RS. (see *Gazetteer*). For the first 20 miles the country on both sides of the river is low-lying. To the W. there are hills 3 to 5 miles distant, 800 to 900 ft. in height; on the E. is flat rice and mulberry country.

miles	
	For details up to mile 7¼, see Route 47.
7¼	*Bamboo River* comes in on l. **Shui-hau,** village on its l. bank at the mouth. Two islands lying abreast of each other. Channel to l. Direction NNE. Hills close to bank on r. Flat country and shelving bank on l.
8	Brick works on l.
9½	Brick works and mulberry plantations on r. Low hills behind. Direction NW.
11	Low banks on l.
12½	Bank on r. about 15 ft. high, and revetted with stones.
13	**Wong-tong,** village on r. An embankment runs from here to within ½ mile of Lupao Creek. Route turns l. Direction N.
	Cheong-on, village on l.
14	**Mok-chuen** and **Pak-chuen,** villages on l. Clay bank on r.
14¾	Island 2 miles long covered with mulberry trees. Channel to r. Woods on l.
17	**Wang-hong-hau,** village on r.
	Tsung-on-hü, village on l.
18½	*Lupao Creek,* comes in on r. (see Route 42).
	Lupao, P., a large straggling market town just beyond. Likin station. Many sampans and larger craft obtainable here. Launches stop for passengers. The country is flat except for small 50-ft. knolls. The channel lies between Lupao and an island ½ mile long in midstream.
	Yong-chun, village on l.
20	**Sü-kong,** large village on r.
22	Creek on l. Island and sandbank opposite.
22½	**Lung-tau-chai,** village on l.
	Scrubby vegetation on l. Flat and cultivated on r.
26	**Tatang,** P., market town on r., nearly opposite a large island. The western channel is the one generally

miles

used. Tatang is about ¼ mile long, and appears prosperous. Contrary to the usual custom in this region, the houses are not built on piles. In the centre of the water front is a large market-place supported on pillars.

Village at the mouth of Sam-hang Creek on opposite bank, where scrub-covered hills some 600 ft. high come down to the water's edge. On r. for the next mile or so the country is flat and wooded.

28 **Pun-ping-pai,** village on r.

29 **Mui-fa-chuen,** village on l. Bamboo groves on r. General direction NE.

29¾ Island a mile long. Channel to r.

31¼ **Ha-kai-pai** (Gye-pi on Admiralty Chart and War Office map), village on r. Ground to S. of the village is low, and flooded in summer. Long sandy beach stretching for about 1 mile. Country on r. and l. low and undulating, with occasional bare knolls.

33 Hills on l. recede and leave a belt, about 1½ mile broad, of lightly wooded country.

34 Joss-house built in solid rock on r.

35 **Chun-ma-chuen,** village on l. Low banks on r. Bamboos. Route turns l. and goes N.

35½ From here to Shekkok there is a very solidly built embankment on r. Island 1¼ mile long close to bank on l.

36½ **Chuk-wat,** village about ¼ mile distant on r.

36¾ Small pagoda at foot of hills on l.

37½ **Shekkok,** P., town ½ mile in length on r. On l. is a 100-ft. hill with a conspicuous 5-storeyed pagoda on the summit.

The islands and banks in the river between Shekkok and Sha-cheung (mile 45¾) alter in shape and position annually ; they cover in floods.

38¼ **Hang-tau,** village on l. Cultivated island about ¾ mile long. Channel to r.

miles

38¾ **Tai-yin-han,** village at the mouth of a creek, with 3 ft. of water, on r.

39½ **Tuk-si-kau,** village on r. Trees and bamboos along bank on l. In the next 6 miles there are a number of large islands and sandbanks in the river.

42¾ **Shan-t'ong,** village on l. at the mouth of a creek. Cultivated flat land on r. Channel close to bank on l.

45¾ **Sha-cheung** (marked Chu-ho on Admiralty Chart), small village on l.

46½ 9-storeyed pagoda on l. Rocks in midstream. White beacons on r.

46¾ Creek on l. coming from **Ma-chi-sui** (M.), said to be 25 miles distant; 2 ft. of water. Direction NNE.

49¼ *Kau-miu,* temple on r.

49½ 9-storeyed pagoda on l.

50¼ *Fai Shui* comes in on l. This stream flows down from the Tsingyün mountains; though rapid, it has been made navigable for small craft by frequent dams. Boats ascend as far as **Pakshektam,** P., whence it is only a day's journey over a mountain pass to the Linchow River, a few miles below **Yeungshan,** P. The mail and government couriers follow this route to Linchow. Wood rafts collect near the mouth of the Fai Shui, with good bridging material: poles 15 ft. long.

Route turns r. and goes E. 3-storeyed square tower on r.

51½ **TSINGYÜN,** P. T., district city on l. (see *Gazetteer*). Market for sugar and rice. Launches run daily between Canton and Tsingyün for about 7 months in the year.

High grassy hills about 2 miles distant to l. Bamboo clumps on r.

54 **Lang-sui,** village on l. Deep water creek on r., coming from **Ts'at-sing-ngon,** 3 miles distant.

55¼ Creek on l. Bamboos on r.

57 **Tai-long-tai,** village on l.

miles

Chowsin, P. (500 houses), surrounded by trees, on r. Route turns l. and goes NE.

59½ Stone steps on l., leading to the site of a new arsenal (abandoned in 1909). Opposite is *Chin-chun-chau*, a large island about 2 miles long close to bank on r. The narrow channel to the S. of this island is navigable only in summer. Route turns r. Direction E.

62 **Pakmiu N.,** P., a straggling village on l., at the entrance to the *Fi-loi-sze Gorge*, which extends for about 4 miles. At the entrance the river narrows to 300 yds. in breadth. The lower spurs of the heights on l. rise about 100 ft. above the river ; those on r. descend to the river at a slope of over 45° from heights ranging from 500 to 700 ft. A track runs along the N. side of the gorge. Limestone quarries on either side.

63 *Fi-loi-sze*, the monastery from which the gorge takes its name, standing amongst fine trees on l. The gorge takes a curve to the N., describing a semi-circle, and at its northern end is well defined, the hills on both banks falling away suddenly. On l. they recede inland, leaving a well-wooded plain 4 to 5 miles broad ; on r. they merge into undulating wooded country. The country in general now becomes more hilly, and only narrow strips of plain are found along the river, or small valleys inland, for the cultivation of rice. There are bamboo groves along the bank, and a sparse growth of pines and cedars in the hills.

65½ Temple with triple arch on l.

66½ **Pakonghow,** P. RS., a large village on r. at the mouth of the *Pa Kong* (see Route 38). Direction NNE. At this point the Canton–Hankow Ry. first strikes the river.

68¼ **Shek-li-t'ong,** village on r.

69 **Pak-hok-sun,** village on l.

Country on r. undulating ; hills rising to 70 or

miles	
	100 ft. on l. ; 50 ft. to 100-ft. hills skirt the bank. From here to Wongshek the railway follows the river bank, about 30 ft. above the water.
71½	**Wong-tung-hau,** village at the mouth of a small creek on l.
72½	**Shek-pai-hang,** RS., a few hundred yards distant on r.
73½	Route turns l. and goes N. Thick bamboos and scattered villages on l. Low red cliffs, bamboos, and paddy fields on r.
75½	**Wongshek,** P. RS., market town of over 300 houses lying at the foot of hills on l. The railway station is on the opposite bank.

ROUTE 56

WONGSHEK TO YINGTAK

Water Route (23¼ miles)

Authorities : Lt.-Col. G. Pereira, January 1907 ; War Office MS. map no. 200 (1) ; Map of Yut Han Railway, no. 337 (1908) and no. 364 (1909) ; *China Sea Pilot,* vol. iii ; Chinese map of Kwangtung, 1879 ; Admiralty Chart 3218 (1913).

General direction NE. by N. The journey was made in a small boat, called *t'an-tze*, about 27 ft. long, with a deck-house covered over with matting stretched on a wooden framework. The deck-house was 11 ft. long, 5½ ft. wide and 4 ft. 9 in. high. The crew usually consists of 5 hands. The boat is towed most of the way and occasionally rowed, the average rate upstream being 2 miles per hour.

The water of the North River is very clear and runs over a bed which is sandy nearly the whole way. Hills lie near to the river up to Kong-hau, after which a gorge with higher and wider hills is passed. For the last 7 miles, the country is more open, with a plain to the E. There is a belt of bamboo along both banks nearly all the way up to Kong-hau,

afterwards only at intervals. The higher hills are grass-covered and treeless, the lower hills either sparsely covered with fir or fairly well wooded.

Villages are small and not numerous or important.

The Canton–Hankow Railway and telegraph line closely follow the east bank all the way to Yingtak, a branch of the telegraph line crossing the river at that point.

8 *t'ang* or stages are reckoned from Wongshek to Kong-hau, and another 5 *t'ang* to Yingtak.

There are many boats on the river, mostly carrying wood or loads of long grass. A steam launch runs every other day between Canton and Yingtak from May to September.

Most of the towing is done from the left or east bank. There is a path from Wongshek to Yingtak along the west bank, but it is very bad and little used.

River pirates infest the river in the gorges N. of Kong-hau and near Lao-ti-wan.

There is considerable divergence between the various maps as regards the location of villages, &c., on this route. The distances given below have for the most part been measured from the Admiralty Chart.

miles	
0	**Wongshek,** P. RS. The average width of the river as far as Kong-hau is from 200 to 300 yds. There are hills on either side all the way. Many large sandbanks run out into the river.
	At the start there are hills, 300 ft. high on either side, which come down to the river banks. They are sparsely covered with fir. Direction N.
1¼	**Hau-hi-t'ong,** village on r.
2½	**Sam-liu-t'ong-sun,** village on l.
	Ngau-p'i-t'ong, village on r.
3	*Kai-hun Creek,* said to be navigable for 30 miles, and **Tai-yeng,** village on r. Bank upright, 12 ft. clay, with bamboos on top. Just beyond is *Tai-miu-hap* (Great Temple Gorge). Crag 1,450 ft. above river level on l. Hills rising to 840 ft. on r.

miles	
4½	*Heung-lo-hap* (Censer Gorge) begins here.
5	3-storeyed pagoda on l. Hills lower and more wooded.
5½	Shallow creek coming from **Laitung,** P., on l. Laitung railway station is about 1½ mile further, on r. Low hills on r. River 8 ft. deep, and wider.
8	**Siu-cheung,** village on r.
9	**Lam-hang,** village on l. Narrow creek to **Sai-han** on r.
10	**Tai-cheung,** village on l. Hills now 200 to 500 ft. high.
11½	**Wong-to-hang** (Wong-shang-kau on Admiralty Chart), village on r.
13	**Kong-hau** (30 houses, over 20 being shops) on l., at junction of Linchow River with North River, and on the left bank of the former. Railway station on opposite bank of North River. The Linchow River is here about 80 yds. wide. About a dozen *yen-ch'uan* (boats about 75 ft. long and 2 ft. draught) were seen. These are said to be able to reach Linchow, about 100 miles up the Linchow River. (See Route 66.)
	North of Kong-hau the river flows in a narrow and winding channel between grassy treeless hills 1,000 to 1,200 ft. high. Path on r. Boats are rowed, not towed.
14	Through *Mong-tsai-hap* (Blind Boy Gorge), 50 to 100 yds. broad. Forward bearing 85°.
15	Through *Tsing-yang Gorge* between 1,000-ft. hills. Path on l.
16	Lower hills, with some fir ; bamboos again along banks. Here boats can again be towed.
	Po-lo-hang Creek on r. About 3 miles from l., the road to the country beyond passes through the *Pik-lok-tung*, a natural tunnel about 100 yds. long, 50 ft. wide, and 30 to 15 ft. high, with a brook of clear water flowing through it.

miles

Hills now recede and valley opens out to a small plain, chiefly on r. Plain continues on r. the rest of the way to Yingtak.

18 Cone-shaped hill 200 ft. high on l. 20 ft. cliff on r.

18¼ River widens. Island lying abreast of a rocky-hill on l.

18¾ **Lo-ti-wan** (2 villages) on l. (the northern village is also called **Tai-shek-leng**). Limestone quarries at this place supply cement which is sent to Hongkong, Amoy, and other ports. The stone is run down the sloping banks in wheelbarrows and discharged into junks, some 30 of which were counted in July 1904, moored along the bank. Channel 50 yds. wide, 10 ft. of water. Route turns r. and goes NE. Rock hills on l., which soon recede again.

20 Cultivated land on r. 500-ft. hills about a mile distant. Trees on l.

22¾ 9-storeyed pagoda on r.; 3-storeyed pagoda on l. One strand of telegraph crosses the river to Yingtak. Country opens out on r.

23¼ **YINGTAK,** P. T. RS. (H.: Yin-tet), a busy shipping port at the junction of a small tributary, the *Shek Shui*, on l., and the limit of regular steam navigation on the North River (see *Gazetteer*). The *Yungyün River* also called *T'ung Shui* (Copper River), joins the North River opposite the town. Though shallow and full of rapids, it is navigated by small, wedge-shaped boats, which bring down charcoal from **Yungyün** (P.), about 30 miles distant. On an average about 60 boats go up daily. There is no path alongside the river.

ROUTE 57

YINGTAK TO SHIUCHOW

Water Route (61½ miles)

Authorities: Lieut. R. M. Crosse, August 1909; War Office MS. map no. 200 (1); Map of Yut Han Railway, no. 337 (1908), and no. 364 (1909); *China Sea Pilot*, vol. iii; Admiralty Chart 3218 (1913); Chinese map of Kwangtung, 1879.

General direction N. As far as mile 58, the current at low water is gentle, averaging 1½ knots, except in the neighbourhood of Pakto N. (mile 47½), where it attains a speed of 3 knots over about a mile.

The railway and telegraph run along the left bank (on the right of the route), following approximately the course of the river, and only leaving it to cross bends.

The road lies at first on the right bank of the river, crossing to the left bank at Hotow (mile 7½), and recrossing opposite Shiuchow.

Steam launches do not ascend above Yingtak, but gunboats have frequently been as far as Shiuchow. By boat the journey usually takes 5 days.

The surrounding country is more or less hilly throughout. A large amount of barley is grown on the river banks between Yingtak and Shiuchow.

miles	
0	**YINGTAK,** P. T. RS. (see *Gazetteer*). After leaving Yingtak, the route turns N., the river flowing between high banks with large rice fields and sugar-cane plantations along its course.
1¼	100-ft. hill with temple on l.
2	**Choi-chau-tau,** village on r. Bamboos on l.
3½	Channel 30 yds. wide, 3 ft. of water.
3¾	**Kong-wan,** village on l.
	Mau-i-shek, village and cliff nearly opposite on r.
5	Boat creek on r.

miles	
5¾	**Pak-sha,** village ¼ mile from bank on l. (See Route 58, m. 6¼.) Island. Channel to r.
6¼	Deep narrow creek on r. coming from *T'ai-p'ing.*
7	**Mongfukong,** P., village with Wesleyan Mission Station on r.
7½	**Hotow,** P. RS., village on r. with conspicuous pawnshop tower. Small pagoda ¼ mile to N. In the next 6 miles, the route curves round to l. until it is running WSW., afterwards bending back to r., and resuming its former direction of NNE. The country is fairly flat and well cultivated on both banks. Hills, sometimes isolated and sometimes in ranges, are seen, but they seldom reach 200 ft. in height. On l. trees are fairly plentiful, timber 4 to 5 in. thick.
8¾	Joss-house on r.
9	Creek on r., crossed by railway about 1¼ mile from its mouth.
11½	Trees on r.
13	Cliff on l., covered with dense foliage, and rising almost vertically some 600 ft. from the river. At the foot of the hill a stone stairway leads to the cave-temples dedicated to Kun-yêm, the Goddess of Mercy, which pierce the cliff in all directions. Water very deep here.
13½	Sulphur Creek, a small tributary on l., with the village of **Kun-yêm-hang** on the north bank at its mouth. Direction NNE.
14¾	Rocks on both sides of the channel. Hills with limestone quarries on r. The stone is of good quality, and was used for making concrete for the railway at this point.
15¼	**Pak-shek-yiu,** village on r.
16	*Liang-p'ai-t'an,* rapids. The passage for sampans is close in under l.; here are two rocks exposed at low water. There is a deep water passage along r., but the current is very strong. From this point onwards

miles

the banks rise to some 40 ft. in height, thus rendering the country less liable to flood.

17 **Kau-poi-san,** village on r.

17¼ *Kai-tau-hiu Creek* on l., leading to *Ngau-am-t'am*, a small lake about a mile distant. Channel to r. of island opposite mouth of creek. On r. is the *Lung-t'au Shan*, a hill some 400 ft. high, ending abruptly at the water's edge in a 150-ft. cliff. Boats are here poled along the face of the cliff. A little way above this point the railway again meets the river.

Hills are grass-covered ; those on l. afford good camping-grounds. River water is clear, and landing fairly easy.

17½ **Lung-t'au-ying,** village on l.

18½ **Hu-kau,** small village on l.

19¼ **Tung-kwa-pau,** village on r. ; **Pei-pu-tan,** village on l.

19¾ Sugar-loaf Hill (400 ft.) on l. Thickly wooded hills 350 ft. high on r.

20¼ Channel on l., 20 yds. wide, 3 ft. deep.

22 Joss-house on r. Trees on l.

22¾ **Ts'ing-k'ai,** RS., village on r. Route turns NNW. Railway leaves the river. Country consists of grass-covered hills. River banks 30 to 40 ft. high and somewhat precipitous.

24 Route turns r.

24¾ **Tung-pa-ts'ün,** village on l.

25 **Shahow N.,** P. RS., village on r., with steps down the bank, which is steep, to the water. Roman Catholic and Wesleyan mission houses on the water front, under native pastors. Village is about ¼ mile long, and about 25 sampans were noticed. During the low-water season the Canton salt junks tranship their cargoes here into small flat-bottomed junks which go up past Shiuchow into Hunan.

25¾ River narrows ; large rocks jut out into the stream,

miles	
	leaving a navigable breadth of about 100 yds. Direction now NE.
26	**Tung-pai,** village on l.
27¾	Channel 50 yds. wide, 6 ft. deep.
28	*T'an-tze-ki* (Cannon Ball barrier), prominent landmark on l., consisting of an isolated hill ending abruptly at the water's edge in a cliff some 50 ft. high. Village opposite on r. Neighbouring country low hills for 2 miles on both sides of the river.
28½	**Sam-tung,** village on l.
30	**Sai-lin-tan,** village on l. Railway hut on r., where a good gauge of river height can be seen. The bunding below the hut should be awash at mean water. On August 30, 1909, the water was 3 ft. below mean. At this point at flood period the water has risen as high as 28 ft. above mean, but the height of the banks is over 30 ft. Mean river level is 110 ft. above Canton mean level.
31	**Sam-chung,** village on l.; **Cheung-kong-pa,** village on r.
32	Sandbanks on l.
32½	**Tai-hang-hau,** RS., village on r. at the mouth of a creek 6½ miles long, with 4 ft. of water. Flat, cultivated strip of land on l. The river is about 6 ft. deep here at mean level. Route turns l. and goes N.
34¼	Tributary on l., 2 ft. deep.
37	**Wushek,** P. RS., on r. Landing good on both banks. Ferry with two boats, each holding 30 men. The country is sparsely populated, but fairly flat and dry. Good camping-ground within easy reach of the river. Orchards and barley fields on l. A road goes E. to the monastery of *Nam-wa*, 10 miles distant.
	After Wushek the country is undulating and fairly dry. There is a good supply of cattle. River banks high and steep for about a mile, after which they are

miles

lower, with a gentler slope. River about 6 ft. deep at low water.

Route bends l. and goes NW.

39 **Fu-tao-leng,** village ¼ mile distant on l.

40 *Tai-wong-miu,* temple on l.

40¾ Island. Channel on l. between island and rocks, 60 yds. wide.

41½ 3-storeyed pagoda on l.

43 Islands. Channel to r. In the next 2½ miles the river curves to l., forming a semi-circle.

43¾ Shallow creek on l.

44¼ **Pak-sha,** village on l., with broad steps leading down to the water. **Chi-ko-tan,** village on r.

45½ Barren grassy hills on both banks.

Route makes a sharp turn to l., and goes N.

46 **Tong-kong-yiu,** small village on r.

47¼ Shallow creek leading to **Mapa,** P., about 10 miles distant on r. *Pak-ma-miu,* temple on l.

47½ **Pakto N.,** large market town on l. The town is about 40 ft. above mean river level, and is about ¼ mile long. There are three broad flights of steps leading to the water's edge, and two ramps 30 ft. broad. At low water, a sandbank appears 2 ft. above water.

About 20 junks and a large number of sampans would probably be available here, but the number would vary considerably. On the opposite side of the river is a deep water passage under 100-ft. cliffs. The current for a mile is about 3 knots. In the hills above Pakto coal can be seen outcropping in many places, but it is not now worked.

48 *Lung-kwai* (or *Yüyüan*) *Shui* comes in on l. This river flows from **Yüyüan** (P.), some 30 miles distant, through a mountainous country inhabited by Yiu tribes. (See Route 64.) The products of the Lung-kwai district are bamboo, maize, and charcoal.

miles

Yü-yüan-hü, a large village, lies ½ mile from the North River on the r. bank of the Lung-kwai Shui.

49¼ Island ; channel to r. Route turns l.

51¼ Island opposite **Kau-tan-cheong**, village on l., and another village on r. Route turns r.

52½ *T'ung-ku-chau*, a well-wooded island, ¾ mile long, taking its name from the *T'ung-ku* (Bronze Drum) *Mts.* about 8 miles to the W., on the r. bank of the Lung-kwai Shui. There is good anchorage to the E. of the island. Channel 30 yds. wide between island and rocks on l. Route turns r. Direction ESE.

53¼ **Yiu-tong-po,** village on l.

54½ Joss-house on l.

55 **Ch'e-t'au,** village on l. Country here is very rocky. River banks about 25 ft. high.

55½ Route turns sharply l. Direction N. by E. Cliffs on r. Flat country with trees on l.

57 **Pak-mong,** village on r. ; another small village on l. Grassy hills trending NNE. on r., with cultivation between them and the river. *Liang-tun Shan*, two hills in the shape of breasts about 4 miles distant on r.

57¾ **Tze-kai-tau,** village on r. Island covered with bamboos. Channel to l. Thick trees on l.

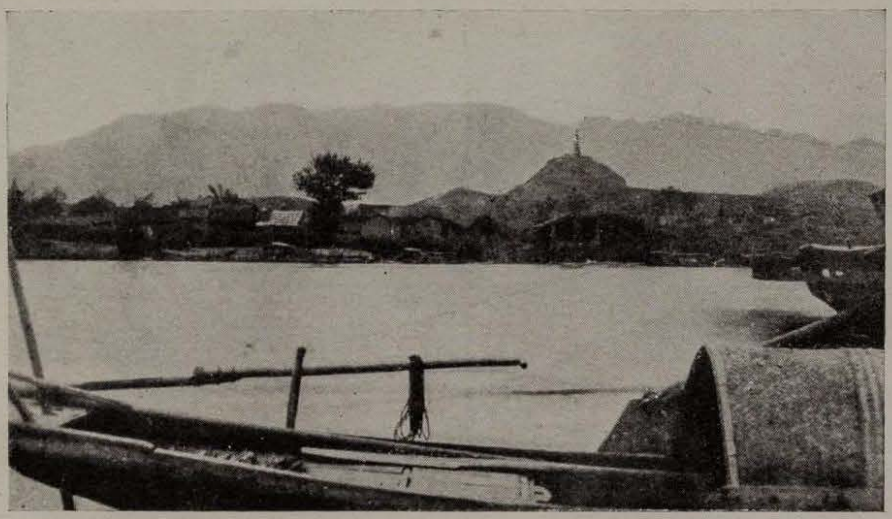
58 Good camping-ground on l., 2 hours' march from Shiuchow. Main road (see Route 58) follows river bank.

From here to Shiuchow the current is strong, attaining in places a speed of 3 knots.

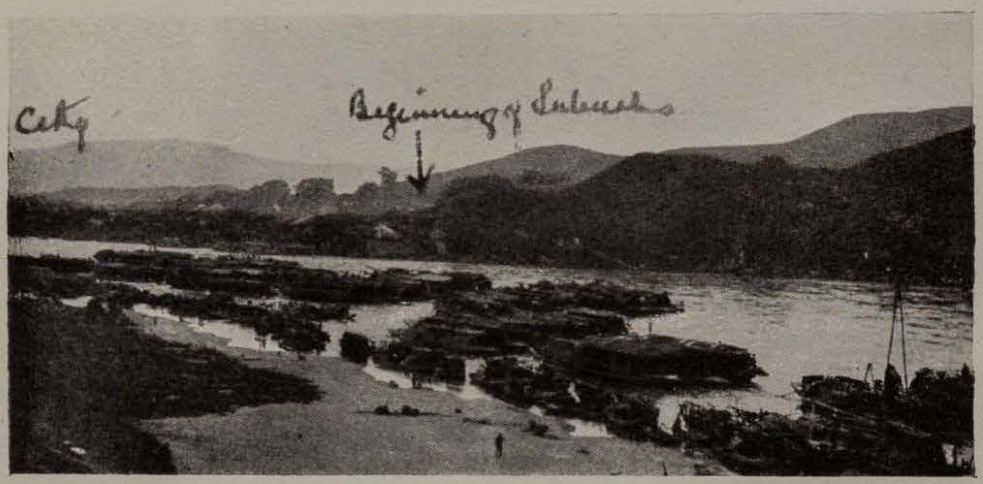
59 Ruined joss-house on l.

60 **Sai-kong-mei,** suburb of Shiuchow, on l. Here are the buildings of the British Wesleyan Mission. Just above is the junction of the *Wu* and *Tsêng* Rivers. Route ascends the former (on l.).

61½ **SHIUCHOW,** P. T. RS. (called locally **Shiu-kwan**). Barrier of boats. For description, see *Gazetteer*.



LOKCHONG PAGODA



SHIUCHOW: BOATS ON THE WU SHUI

ROUTE 58

YINGTAK TO SHIUCHOW

Land Route (58¼ miles)

Authorities : Lt.-Col. G. Pereira, January 1907 ; War Office MS. map no. 200 (1) ; Chinese map of Kwangtung, 1879.

General direction N. by E. Coolie transport is used by this route. Farm carts are employed by the natives in the flatter parts of the country, and the route sometimes follows these cart roads, but generally it is only a footpath paved with uneven stones. To make a good cart road all the way would not be difficult.

The road crosses to the left bank of the North River at Hotow (mile 8) and recrosses it opposite Shiuchow. It lies for the most part near the river. The country is poor, with few crops, and thinly populated. Villages are mostly small and inns very dirty.

The railway and telegraph lie on the left bank of the North River, and near the route N. of Hotow.

Food is expensive in Shiuchow, but is cheaper as one goes N. into Kiangsi or Hunan.

The Yiu-yan (aborigines) occupy the hills to the N. and NW. of Shiuchow.

miles.	
0	**YINGTAK,** P. T. RS. From here to Shahow N. the path is usually unpaved, but sometimes it is paved with rough stones. It is used in places by farm carts, and their tracks are often visible on diverging paths. The country is flat or undulating and surrounded by low hills, with higher hills in the background on either side. The soil is poor, and a good part is given up to grass or fir or small plantations, chiefly of bamboo. The path runs alongside or near the North River for 3¼ miles, crosses opposite Hotow, runs along the

miles	
	left bank for 2½ miles, and meets it again 10½ miles beyond Hotow.
	Leaving Yingtak, the path bears 10° along towing-path on right bank of North River. 200-ft. hills ¼ mile to l., with plain and lower hills behind. Plain on left bank, with occasional low isolated hills, bounded to SE. by the lofty *Wu-keng-ao*.
2	**Yang-tang** (100 houses) behind hills to l. Path leads through a strip of bamboo cultivation alongside river.
3¼	Path now mostly paved with large stones.
	Kong-won-ch'un (200 houses). Country now partly grass waste and low hills with fir, partly flat and cultivated.
6¼	**Pak-sha** (50 houses).
7¾	Drop of 30 ft.; cliffs along river bank. Across 50 yds. belt of sand, and ferry over North River, 200 yds. wide, 5 ft. maximum depth, clear water, to Hotow.
8	**Hotow,** P. RS. (120 houses). Route leads across undulating ground with some crops.
8¾	Gap through 150-ft. hills with grass and some fir. Forward bearing 350°. Undulating country, partly crops, partly grass or fir. 150-ft. hills around.
10¾	Forward bearing 50°.
12	Forward bearing 10°.
12¾	Gap between 200-ft. rocky hills past undergrowth and fir.
14	*Lung-t'au-ngam* (Dragon's Head Cave) on r., village of 20 houses ½ mile to l.
	Forward bearing 15°. Along valley 2 miles wide between grass and rocky hills of varying shapes. Some crops and sugar-cane, grass and fern.
16¼	**Tung-kwa-tze** (35 houses) ¾ mile to r.
18¼	Forward bearing 35°.
18½	100-ft. rise and fall over the *Chien-kang*, a small

miles

rocky pass. Road meets North River on l. Country undulating and mostly grass, bordered by 300-ft. hills, on r., with high range behind ; more fertile on r. bank.

20¾ **Ts'ing-k'ai,** RS. (100 houses).

21 Road leaves river and leads N. over 100-ft. hill, then across low-lying ground, partly crops and partly grass, to Shahow N.

23 **Shahow N.,** P. RS. (130 houses, 80 of which are shops). The path keeps close to the l. bank of the North River, either across easy slopes of grass hills, or, where the hills recede, across undulating country. Villages and trees few ; where such exist they are usually on the river bank or in stretches of open country. Much grass, crops only in a few places. After the first 4 miles, the country is more open and fertile on the r. bank of the North River. The path is mostly paved with uneven stones. The railway and telegraph run near the path. There are many boats on the North River.

From Shahow N., the road bears 30° across undulating ground with some rice. High hills to E. and W. Lower and more broken hills to N.

24¼ Among 200-ft. grass hills and over the *Ch'en-kung Kang* (410 ft.), 180-ft. rise.

25¼ Top of pass. Rocky descent, but not steep.

26 Across easy slopes, alongside North River. Rocky hills on farther bank.

26½ **Fung-t'in** (20 houses). Country more open to r. Some wheat and rape crops. Steep hill, *T'an-tze-ki* (see Route 57, mile 28), on farther bank, after which country opens out to W. and hills recede.

29¼ **Hsia-pien** (20 houses). Some trees and undergrowth on hills to r.

30½ Across easy slopes of 300-ft. to 500-ft. grassy hills, falling away gradually to the river.

miles

$31\frac{3}{4}$ **T'ang-chiang-pu** (50 houses) $\frac{1}{4}$ mile to l. Plain to W.

33 Forward bearing 55°, route bending with river. 70-ft. drop, and across a small stream by a plank bridge to

$33\frac{3}{4}$ **Tai-hang-hau,** RS. (40 houses). Route lies N. across undulating ground, mostly grass. Hills recede to r.

$35\frac{3}{4}$ Hills again close in from r.

37 Undulating ground. Hills to r. recede. More trees.

$38\frac{1}{4}$ **Wushek,** P. RS., market town of 500 houses.

Route now leaves the North River ; the footpath, which is mostly paved, runs across undulating ground and past low hills.

Crops only in parts ; country mostly grass with a good many firs.

On leaving Wushek, forward bearing 330°.

Path crosses stream by a stone bridge of 5 piers.

39 Route leaves North River which bends W.

$39\frac{1}{2}$ Forward bearing 25°. Gradual rise between low hills.

$40\frac{1}{4}$ On l. some paddy and firs, on r. 300-ft. grass hills.

41 Up a valley between 500-ft. hills covered with firs. More villages and trees.

$43\frac{1}{2}$ Forward bearing 350°. Across undulating ground with rice-fields. Country more fertile. Grass hills on r.

$45\frac{3}{4}$ Forward bearing 10°.

$46\frac{3}{4}$ Through a fir wood, and then across a rice plain. Route crosses *Mapa Shui* (see Route 57, mile $47\frac{1}{4}$), 30 ft. wide, 6 in. deep, clear water, by a bridge of planks on trestles, 100 yds. long, to

$47\frac{3}{4}$ **Mapa,** P. RS., scattered village of about 200 houses. From here to Shiuchow the track leads across a rice plain and among grass hills for 5 miles, then along

miles.

l. bank of North River, which is finally crossed at Shiuchow. Telegraph near footpath, which is mostly paved. From Mapa across rice plain, forward bearing is 5°, with low hill on r. Small villages dotted about.

49¾ Over slopes and among 200-ft. to 500-ft. grassy hills with an occasional rocky one. Very few crops.

50 Forward bearing 335°.

52¼ Undulating; more rice.

52¾ Route reaches North River on l. Forward bearing 15°.

53 **Pak-mong** (20 houses). (See Route 57, mile 57.) Along level belt with crops and some small villages. Farther bank of river undulating. Valley on either side bounded by 300-ft. grass hills, with some fir.

53¾ Bamboo island ½ mile long, and sandbank on l.

55¼ 500-ft. grass hills 2 miles to r. and on farther bank.

57¾ 15-ft. drop, across 50 yds. of sandy belt, and ferry up North River, 200 yds. wide, clear water, sandy or stony bed. Country more open. Bearing up *Wu Shui* 355°, up the *Tsêng* (or *Chu*) *Kong* 35°.

58¼ **SHIUCHOW,** P. T. RS. (see *Gazetteer*). Route enters South gate by a stone bridge over a moat. There is the usual brick wall round the city, which lies in the fork made by the junction of two branches of the North River. The commonest names for these branches are Wu Shui for the western branch and Chu Kong for the eastern branch. The western branch is also called Sai Shui and Lokchong Kong (from the city of that name), whilst the eastern branch is also called Tung Shui and Tsêng Shui. Neither branch is ever called Pak Kong or North River. Except in the dry season, large river boats can go up the Wu Shui as far as Lokchong, and small boats can go on to Pingshek. Small boats can go up the Kam or Yanfa River (a tributary of the Tsêng Shui) to Shinghow. The Tsêng Shui itself is impeded by

miles

rapids and is navigable only for light-draught junks as far as Namyung.

The big merchants are mostly Cantonese, whilst the poorer classes are mostly Hakkas. The Punti or natives of the province belong chiefly to the farmer class, but most of them can speak Hakka ; they are not so numerous in the city itself.

There is enough rice in the surrounding country to feed the city ; it comes chiefly from Mapa, and is of very good quality. The Sai Shui coal mines are at Liputow about 9 miles up the Wu Shui ; the coal from them is better than that of the Tung Shui mines, about an equal distance up the Tsêng River.

ROUTE 59

SHIUCHOW TO NAMYUNG

Land Route ($71\frac{3}{4}$ miles)

Authorities : Lt.-Col. G. Pereira, January 1907 ; War Office Provisional Map of the Province of Kuang-tung, 1911 ; Chinese map of Kwangtung, 1879.

General direction NE. The route follows a footpath which broadens out to 3 or 4 ft. for the last 10 miles ; it is mostly paved with uneven cobble stones. It often runs alongside or near the Tsêng River, which is crossed three times by ferry, and once by bridge at Namyung, the only bridge over the river between this spot and Samshui. The route runs past level patches of cultivation and over low hills or rice valleys. The country increases in fertility until Namyung is reached. High ranges of hills run roughly E. and W. each side of the route at a distance of several miles.

Villages increase in size and number as the more fertile parts are reached. They are rendered conspicuous by lofty square stone towers, loopholed for defence, in which the people store their valuables.

The telegraph line lies on the left bank of the Tsêng River not far from the route. There are a good many boats on the river, and large river boats (*ho-t'au*) can ascend as far as Namyung.

In the Namyung district, the rains occur in May, and sometimes also in June, with about 10 days in August. There are spring rains in February and March. At Shiuchow the summer rains occur in June and July. Gunboats could ascend to Namyung in May or June.

The exports of the district in order of importance are tobacco, paper, peanut and camellia oil, wood and rice.

The people of Namyung city and district are practically all Hakkas, whilst up the North River the inhabitants are in the proportion of 4 Hakkas to 1 Cantonese. Hakkas are found in Kiangsi up to Kanchow Ki and even beyond. They are said to have come originally from Fukien province.

miles	
0	**SHIUCHOW,** P. T. RS. (see *Gazetteer*). From here to Chowtin (mile 24¼) the route is only a footpath, partly paved with uneven stones. At times it runs alongside or near the Tsêng River, either over low grassy hills or across open cultivated belts, or else away from the river among low hills and across rice valleys. Country in parts fertile, more so than between Tsingyün and Shiuchow. It is not thickly populated, and villages are small. There are trees near the villages and fir on some hills. Hills near the route are mostly low and covered with grass. There are grass hills 100 ft. high to S. of the route for a good part of the way, and often rocky hills of fantastic shape to N. of the river. Rice is the chief crop. The telegraph line runs near or usually within sight of the route and always S. of the Tsêng River. The river is clear, 80 to 150 yds. wide, with sandbanks and not much water, though there are a good many boats and timber rafts on it. Water buffalo, cows and pigs are common, but there are no sheep.

miles	
	Leaving Shiuchow East Gate, route crosses by ferry over *Tsêng Shui*, here 150 yds. wide, and proceeds along cultivated belt by the river. Forward bearing 350°.
1	**Tung-huo-pa** (100 houses).
1¼	Undulating, mostly grass, some rice in valleys. Route leaves river. Forward bearing 65°.
2¼	Route again approaches Tsêng River on l. 300-ft. grass hills on banks, opening out in places to level patches with crops.
3¼	Forward bearing 55°.
4½	100-ft. rise, and along hills by river.
4¾	**Tung-shui-shan** (10 houses).
5	100-ft. drop, partly steps.
5¼	River bends N. Route leads over and among 100-ft. sandy hills with fir, and past rice valleys.
6	**Liu-t'ang-ts'un** (50 houses). Ford across the *Fung-wong Shui*, 40 yds. wide, 9 in. deep, stony bed, clear water. 200-ft. grass hills on both sides, hills to l. higher and rocky.
9½	**Ch'uan-pa-wei** (20 houses).
9¾	Route leaves river; forward bearing 120°. Among rice valleys and 100-ft. grass hills.
10¾	Forward bearing 70°.
12¼	Forward bearing 55°.
12½	**Kam-kong-p'u** (10 houses).
13¼	**T'sz-ku-t'ong** (Chinese Map: Lai-ku-t'ong), village of 30 houses. Forward bearing 40°, still among low hills and rice valleys. Fantastic rocky peaks to N. of river for rest of way to Chowtin.
15	Forward bearing 345°.
15½	Forward bearing 35°. Across small rice plain. High grass hills 2 miles to r. continue on and off to Chowtin. Rocky peaks 3 or 4 miles distant to N.
16	**Ku-yang** (10 houses). Among 100-ft. hills, grass and fern.

miles

17½ Route goes due N.

18 **Taikiu,** P. (30 houses). Forward bearing 60° across another plain. River a mile or two to l.

19¾ 1,000-ft. grass hills 2 miles to r. Among 100-ft. grass hills with fern and undergrowth. No crops.

20¾ Forward bearing 10° to Chowtin. Some rice fields.

22 Route approaches Tsêng River. Country fertile, and opens out on both banks. More villages and trees.

22¼ **P'ing-po** (H.: Pyong-p'u), village of 40 houses with some shops.

24¼ **Chowtin,** P. (H.: Chu-t'en), market town of 720 houses and some shops, with an out-station of the German Mission. Much timber on the river bank. From here to Konghow Tung, the route lies mostly amongst low hills with plenty of fir, and past rice valleys, partly alongside or near the Tsêng River. In the background to N. and S. there are grass hills from 600 to 2,000 ft. high, which run with breaks E. and W. all the way. Villages small; level ground usually under cultivation. In nearly every village there are one or more square stone towers, with walls about 40 ft. high and loopholed, and small towers at the corners for flank defence. These are used for storing anything of value. Fir trees are plentiful on the lower hills. Some undergrowth. Scenery very picturesque.

About 12 miles to l. is a striking mountain group, including the famous Tan-ha (Red Cloud) Hill with Buddhist monasteries now in decay. This spot can also be reached by ascending the Yanfa River to a point only about 1 mile distant from the mountain.

After Chowtin, route leaves Tsêng River and leads across a rice plain. Forward bearing 60°.

25¼ Undulating, mostly grass.

26 Route meets Tsêng River. Along belt of cultivation

miles	
	bordered by low grass hills, with 800-ft. grass hills in background to the S.
26½	Route crosses sandy belt 70 yds. wide to ferry over Tsêng River, here 60 yds. wide and over 9 ft. deep, to **Pai-shih-mi-ao** (20 houses).
28½	**Ka'lung,** P. (50 houses) in a small plain. River a short way to r.
29¼	Along a rice valley ½ mile broad between 100-ft. hills, covered with fir, on r., and 1,000-ft. grass hills on l.
30½	Among 50-ft. hills with fir, and rice valleys. Route crosses *Chiu-shao Shui*, a small stream, by a bridge of planks on 3 stone piers. Forward bearing 120°.
32¼	Country undulating, rice and fir. Forward bearing 95°.
32¾	**Lang-t'in-kai** (Provisional map : Ling-t'ien-chieh) (35 houses). Rows of low hills covered with fir to S., with high hills behind.
33¾	Across undulating ground near the river with fir trees and rice.
35	High hills 2 miles to l., gradually receding.
36	Ferry over Tsêng River, 50 yds. wide.
36½	**Shuinam,** P. (20 houses). Forward bearing 80° among low hills with much fir and undergrowth. Rice in valleys.
37¼	Route leads alongside l. bank of river ; path ascends and descends alongside 300-ft. hills. Undulating ground to N. of river.
38¼	Along belt of rice 70 yds. wide.
39	Near the river, over low fir hills with undergrowth and past rice valleys.
39¾	Across small plain.
40½	**Konghow Tung**, P., village of over 100 houses, with some shops. From here to Chihing the route, leaving the Tsêng River, follows up the Chihing River, 1 or 2 ft. deep, with only a few small boats or rafts.

miles

After Konghow Tung, route starts along l. bank of Tsêng River. Forward bearing 60°. Foothills to N. of river, plain to S.

41¼ Path leaves Tsêng River and runs over grass waste. Forward bearing 135°. Foothills to r.

42 *Chihing River* on l. (it joins the Tseng River near Konghow Tung). Up cultivated valley between 100-ft. grass hills.

42¼ Ferry over Chihing River, here 50 yds. wide, 2 ft. 3 in. deep, clear water, stony bed.

42¾ **Tung-hu-ping** (100 houses). River on r. Along rice valley between 100-ft. hills with some fir.

44 Forward bearing 100°. 9-storeyed pagoda on hill to r. 300-ft. grass hills to l.

44¼ Forward bearing 120°. **Shih-shih-hsia** (50 houses) on r. 7-storeyed pagoda. Route crosses plain, partly crops, partly waste.

46¼ Through suburb. River near r., with much timber on banks.

46¾ **CHIHING,** P., district city (South Gate). The walled city is very small, containing only about 70 houses, but including the suburbs (Taipinghü N. is really the south suburb) there are from 3,000 to 5,000 houses. There is a resident French priest and a German Lutheran minister.

From Chihing to Namyung the path is mostly paved with cobbles, and for a great part of the way it is 3 or 4 ft. wide ; a good road could easily be made. Only one pass, 200 ft. rise and fall, has to be crossed. The route runs across small plains or undulating ground, or among low hills, which for the first 8 miles are mostly covered with grass and fir, but for the rest of the way are largely given up to cultivation. In the background to the N. and SE. are high ranges from 7 to 20 miles distant, with foothills closer in. Villages after the first 8 miles are plentiful and large,

miles	
	and there are many strong square stone towers. Telegraph line mostly within sight of the road, and always S. of the Tsêng River. The road rejoins the river at mile 51½.
	Leaving Chihing, forward bearing 35° across cultivated plain.
48¼	Route runs N. among 100-ft. grass hills with some fir, rice in valleys. Good unpaved road, 3 ft. wide for 2 miles.
50½	**Sha-t'ang** (20 houses). Forward bearing 70°. Rice valleys wider.
51½	Route rejoins Tsêng River on l., 50 yds. wide. High range 7 to 10 miles to N. Along river past low hills with fir or across level belts where hills recede. Low hills on further bank.
52¼	Small island and small rapid. Forward bearing 60°.
53	New stone bridge over a stream. Up the *Hsin-chai-ling*, easy ascent.
53¼	Top of pass, 200 ft. rise. Route descends to river, forward bearing 65°.
55	Tsêng River bends N. Forward bearing 20° along narrow plain with crops.
55¾	**Wan-t'an** (150 houses).
57	**Ma-tsz-ao,** small market village of 40 houses. Bearing now 70° to Ku-lu-hü (mile 63¾).
57½	Undulating plain 4 or 5 miles wide.
58	**Pi-tien** (50 houses). High hills, 10 miles distant to N., now recede. Stone bridge over a stream called Tsaitang Ho (Yüeh Ch'i on Provisional Map).
58½	**Tsaitangshi,** P. (100 houses).
60¼	**Tu-an-p'u** (50 houses), surrounded by fir trees.
62¼	**Tan-chang** (30 houses). 4 ft. paved road.
63¼	Route rejoins Tsêng River on l.
63¾	**Ku-lu-hü,** market village of 100 houses. Route leaves Tsêng River, over and among low sandy hills,

miles

mostly under cultivation. Forward bearing 60°, gradually bending round to 345°.

66¾ Route crosses stream by stone bridge of 4 piers to **Hsiu-jên** (20 houses). Forward bearing 35°.

67½ Again among sandy hills, mostly cultivated.

68½ Forward bearing 75°, bending round to 45°.

70¾ Stone bridge over Tsêng River to T'ai-p'ing Gate (S. suburb of Namyung). Another branch of the river runs past the west wall of the city and is also crossed by a stone bridge. Bearing of 2 peaks in range several miles off: *Chun-tsz Shan* due N., *Niu-ko Shan* 10°. Through crowded suburb.

71¼ **NAMYUNG,** P. T., South Gate of city. (See *Gazetteer*).

71¾ Old Examination Hall. The population of the town and suburbs is said to be about 120,000. There is a German missionary in the city and another at Hsiu-jên (mile 66¾). A French priest of the Missions Étrangères lives at **Kiang-kong,** about 3 miles E. of the East Gate. Namyung means Southern Fortress, and is so called because it formerly belonged to Kiangsi, until about 200 years ago, when the watershed was made the boundary. The high hills to the SE. are 7½ miles distant, and those to the NNW. 13½ miles from the city. In the country there is usually a sort of haze, bad for the eyes, and said to be caused by the dusty soil. The city is 380 ft. above sea-level.

ROUTE 60

NAMYUNG TO NANANFU

Land Route (24¼ miles)

Authorities: Lt.-Col. G. Pereira, January 1907; War Office Provisional Map of the Province of Kuang-tung, 1911; Chinese map of Kwangtung, 1879.

General direction N. The road is a good one from 8 to 10 ft. wide; though it is mostly paved with uneven cobbles, there is usually a smooth path on either side of the cobbles.

The country around Namyung, stretching NE. and W. to the boundary hills, is a fertile rolling plain of a pink-coloured sandy soil, partly undulating and partly foothills. Villages are plentiful, but generally small. After the first 12¾ miles the road runs up a rice valley between 300 to 500 ft. grass hills. At mile 18¼ the route crosses over the Mei-ling (Plum Pass), a rise and fall of 500 ft., and measured by aneroid 1,510 ft. above sea level. The pass is narrow and winding, with a rather steep ascent and descent, especially the latter.

The soil south of the Mei-ling is very fertile and is devoted chiefly to the cultivation of tobacco and rice. Wood paper and oil are also exported. There is much coolie traffic on the route, but no wheelbarrows or ponies were seen.

North of the Mei-ling there are red sandy foothills with fir, intersected by rice valleys, and high hills in the background to N. and NNW. The high range separating the provinces of Kwangtung and Kiangsi here runs roughly E. and W.

There are a good many inns of the usual Chinese type along the roadside.

The telegraph line lies near the road all the way.

The Mei-ling is about 265 miles from Canton by Routes 54, 56, 58, 59, and 60.

miles.	
0	**NAMYUNG,** P. T. (see *Gazetteer*). Leaving the Examination Hall, route leads up main street.
¾	East Gate.
1½	Route reaches country. Rolling plain and low sandy hills, nearly all devoted to cultivation.
1¾	Forward bearing 25°.
3½	**Ni-t'ang** (20 houses).
5	**Wang-chia-ch'iao** (40 houses).
5¼	Bearing to two peaks, *Niu-ko Shan* 330°, *Chun-tsz Shan* 340°.
6½	**Lung-kong-hü,** market town of 250 houses.
7¼	Forward bearing 45°.
7½	3-arch stone bridge over stream.
8½	Forward bearing 345°. Country is partly undulating rice plain, partly low sandy hills with fir.
9¼	**Sha-t'ang** (10 houses). Forward bearing 15°.
10¾	**Li-teng** (60 houses). Route crosses stream by 3-arch stone bridge. Fewer crops.
12	**Ling-t'an** (50 houses). Forward bearing 340°. Rice valleys and 100-ft. hills.
12¾	**Huai-huai** (10 houses). Up a rice valley ½ mile wide between 300 and 500 ft. hills. 620 ft. above sea level.
13¾	3-arch stone bridge and 7-storeyed pagoda on r. **Hsia-chung-chan** (80 houses, mostly inns).
14½	**Shang-chung-chan** (100 houses, with inns). 730 ft. above sea level.
15½	**Hsiao-lin** (50 houses).
16½	Bearing 20° to foot of Mei-ling, but the road is very winding. Route crosses the *Chin-kuei Shan*, 150 ft. rise and fall, easy gradient, and passes stone quarries.
17½	**Hsin-lao-k'ou** (40 houses). Up rice valley ¾ mile wide, between 300 to 500 ft. hills with some fir.
18¼	**Mei-ling-chüeh** (20 houses). *Cheng-ku-an*, Buddhist temple ½ mile to l., 1,000 ft. above sea level. Route turns N. up winding and rather steep ascent of the

miles

Mei-ling, a narrow pass between 800-ft. hills, fern and undergrowth. Road 6 to 8 ft. wide and paved with cobbles.

19 Top of Mei-ling (1,510 ft. above sea level), the watershed between the West and Yangtze Rivers. A gate in a cutting between hills 300 ft. higher marks the Kwangtung–Kiangsi border. Bearing to Nananfu 12°. View to N. over red sandstone foothills with fir, intersected by rice valleys. High ranges in background to N. and NNW. Steep descent, mostly steps down cobbled road. Trees and bamboos plentiful, some palm.

20 End of the steep portion of the descent, 1,010 ft. above sea level. Down rice valleys among foothills.

20¼ **Lê-sa-p'u** (20 houses).

21¼ **Huang-ni-p'u** (40 houses).

22 **San-pan-ch'iao** (10 houses).

22¾ Forward bearing 25°. Over 100-ft. hill and across rice plain.

24¼ **NANANFU,** P. T., South Gate (780 ft. above sea level). The old city is N., and the new city S. of the *Chang River*. The latter is 300 years old. Each is surrounded by a brick wall. In former days, the Mei-ling was the chief route from Canton to Peking, and Nananfu was a very important place. It suffered very much from the T'ai-p'ing rebels, and waste places and ruins still mark their traces. A German missionary and his wife are the only resident Europeans. The population of the two cities may be estimated at 40,000.

The Chang Shui flows through the city, and is here about 40 yds. wide and 2 ft. deep, with very clear water and stony bed. Boats go from here to **Kanchow Ki.** One fairly large river boat was seen, besides several smaller ones. There are two bridges across the river, one a very remarkable old bridge, with

miles

wooden shops on the sides, built on stone piers, each supporting a pile of beams, which act as cross pieces for bearing the roadway. The other bridge is a light one of planks resting on 6 large gabions filled with stones.

Nananfu lies in a small rice plain surrounded on E. and W. by foothills with higher grass hills in the background, on the S. by the Mei-ling range, and on the N. by some high ranges including the *Hsi-hua Shan*, about $3\frac{1}{2}$ miles distant to the NW., and the *Ya Shan* (double-peaked) about 6 miles to the NE.

The people are mostly Hakkas, with a good many natives of Kiangsi and some Fukienese.

There is a middle school for 40 pupils, but it is a poor building in comparison with those of other provinces.

Snow sometimes falls towards the end of January and beginning of February, which is the coldest season of the year.

From Nananfu there is a land route as well as a water route along the course of the *Kan Kiang* via **Kanchow Ki** ($59\frac{3}{4}$ miles), **Kianfu** (181 miles), and **Linkiang** ($270\frac{1}{4}$ miles), to **Nanchang** ($346\frac{3}{4}$ miles).

Notes to Routes 61, 62, *and* 63

Water Transport.—The general depth of the Wu Shui at high water is 15 ft. above the low water level, but the river is very swift-running in places, and launches do not ply. At low water it is fordable in many places, and often at rapids which lose their speed as they become really shallow. A single day's rain may make a difference of 4 ft. in depth.

The selection of boats, therefore, is largely dependent on the time of year. Whenever possible, sails are used, otherwise the boats are usually tracked, i.e. towed from the bank. The best type of boat for all-round purposes between Shiuchow

and Lokchong in dry weather is a boat 30 ft. long, 5 ft. beam, 1 ft. draught and 1½ ft. freeboard. This boat carries from 3 to 4 tons. For high water the following may be used : 36 ft. long, 9 ft. beam, 2 ft. freeboard, and draught, when loaded, 1½ ft., carrying 4 to 6 tons. These boats carry 10 and 12 men respectively besides their crew of 6. They are of necessity cramped.

In journeying from Pingshek to Lokchong or vice versa, there are two boats, one which is frail but carries more cargo, and is not recommended, and one which is considered most suitable. The former is the only type capable of plying between Pingshek and Ichang Hun. Its dimensions are : 30 ft. long, 9 ft. beam, 1 ft. draught, 1½ ft. freeboard, and it holds 2 tons or 8 men. The latter is 30 ft. long, 1 ft. draught, 9 ft. beam, and carries 1½ tons or 8 men. Both boats would carry the crew of 6 besides the number of men quoted.

The boats plying between Pingshek and Ichang when water is sufficient are smaller ; they run to a length of 25 ft., beam 5 ft., draught 8 in., freeboard 1½ ft., and would carry 1 ton or 6 men besides crew.

All these boats have a rain-proof cover just low enough to prevent a man standing upright in the boat.

Coolie Transport.—The usual rates of coolie transport apply here as in other parts. Coolies are sturdy and carry well. 80 c. to $1 for going loaded and returning unloaded is the usual price. Transport is scarce, however, for military purposes, except in district cities where 500 to 800 men would be obtainable. Two packages of 40 lb. carried 25 miles in the day are the usual load.

Supplies and Resources.—Agriculture consists chiefly in rice, sweet potatoes, tobacco, tea (of poor quality), and fruit (plums, persimmons, &c.).

Forestry is largely undertaken, and fir, teak, blackwood, and redwood are found in the district.

Many minerals, such as gold, silver, lead, antimony and coal, are found in the surrounding mountainous country. Coal, both ordinary and steam, is very plentiful.

Cattle are few in numbers, and the country cannot be relied on for supplies of meat.

Rice is largely grown and is plentiful.

Kerosene oil is largely imported and can be obtained in the large towns ; ground-nut oil is also easily obtainable.

Forage is difficult to obtain, but fuel is plentiful (see above).

ROUTE 61

SHIUCHOW TO LOKCHONG

Water Route (35 miles)

Authorities: Lieut. R. M. Crosse, Sept. 1909 ; Lieut. R. M. Crosse and 2nd Lieut. Blagrove; War Office map of the Kwong Tong Yueh-Han Railway (no. 443), 1914 ; War Office Provisional Map of the Province of Kuang-Tung, 1911 ; Chinese map of Kwangtung, 1879.

General direction NNW. The river is the usual trade route between Shiuchow and Lokchong, and consequently an abundance of water transport is available, chiefly at Shiuchow. The general breadth of the river is about 350 yds., and the general depth for purposes of navigation 8 to 10 ft. Between Shiuchow and Kwai-t'ao there are 5 to 6 ft. in the deeper portions, but only boats drawing 2 ft. and under can navigate this section of the river. At low river places are passed with only 2 ft. of water, but shallow draught boats are available for such a contingency. After the abolition of the likin tax in 1913, large numbers of shallow draught boats from up river came down to Shiuchow. The current is swift, generally 3 to 4 knots, with 6 to 7 knots in the rapids, which are frequent though not dangerous. Towing is the usual method of progress upstream. Frequent crossing of the river is necessary to negotiate rapids, and distances of 300 to 400 yds. are lost in so doing. The journey upstream occupies 2 to 3 days. The country on either side is generally hilly. There is a fair amount of timber on the left bank ; on the right bank, the hills are chiefly covered with scrub. Large wood rafts are

frequently met with. The timber is collected in the vicinity of Lokchong.

The road from Shiuchow to Lokchong follows approximately the left bank of the Wu Shui, though at times it leaves it in order to cut across the sharp bends taken by the river. The distance by road is about 30 miles.

The railway has been carried to a point about 4½ miles beyond Liputow on the same bank. Construction has ceased since 1916.

For notes on transport, resources, and supplies, see pp. 447–9.

miles.	
0	**SHIUCHOW,** P. T. RS. (see *Gazetteer*). Route starts N. up *Wu Shui* from Customs Station outside West Gate. For the first 5 miles hills 200 to 300 ft. high are seen on either bank. Banks are 12 ft. high, fairly easy for landing purposes. A tow-path follows the river, crossing often from bank to bank.
1½	Bank on r. steep and rocky, the low hills just N. of Shiuchow coming down to the water's edge.
2	Mountain stream joins river on r. Camping-ground for 2,000 to 3,000 men. Route bends l. General width of river here is 320 yds.
2½	Railway close to bank on r.
3¾	Village of 15 houses on r. Hill 900 ft. high, with coal mine, about 1 mile distant on l. Route bends r.
5	**Pat-kok-t'ap** ('Octagonal Pagoda'), village of 60 houses on r.
5½	**King-ts'ün** (100 houses) on l. Country for next 4 miles on l., flat with undulations; on r., hills of 200 ft. Banks 15 ft. high.
6	**Sap-sek-yüen** (60 houses) on l. Just past this village a small tributary 15 ft. wide flows in from r.
6¾	Small village of 20 houses on r.
8½	Island 1,000 yds. long and 50 yds. wide. River 200 yds. broad on either side of island. Banks 10 ft. high and steep. Route turns l.
	Railway again meets river on r. and runs close along the bank as far as mile 11.

miles	
9¼	**Miu-cheung,** market village of 100 houses on l. River 300 yds. broad. Hills on either bank up to 150 ft. high.
9½	Village of 20 houses, surrounded by a wall 10 ft. high, on l. ; village of 30 houses on r.
10½	**Liputow**, P. (Lai-pou-t'au), market town of 200 houses on r. No ferry visible. Walled village of 20 houses on l.
11	Village of 40 houses at mouth of tributary on r. Ry. follows the l. bank of this stream for 1¾ mile, where it crosses, and then continues for about 2 miles further. Hills 50 to 100 ft. high on both banks.
11½	Three wooded islands in midstream. River shallows and sandbanks are visible at low water. Hills recede a mile on both sides. Route turns l. and goes SW.
11¾	**Lin-t'ong,** small village on l. Banks on l. 4 ft., on r. 12 ft. high and steep.
12	**Shayün**, P. (150 houses), at mouth of a small affluent on l. Space available in village for 1 battalion ; on hills opposite for 1 brigade. Village 1½ mile distant on r. Transport available for 100 men. Here the road from Shiuchow to Kwai-t'ao (mile 18) crosses from r. to l. Route turns r.
12½	Ferry. 12 men can be carried at one time.
14½	Tributary on r., with small island opposite its mouth. Route turns l. **Chung-yeung-shui-hau** (150 houses) on both banks. Three rapids between this point and mile 16. Current 6–7 knots.
15	**Seen-long** (200 houses) on r. Banks steep, but can be climbed. Transport for 50 men.
16¼	**Sha-mei** (40 houses) on l. Route turns r.
16½	**Mou-t'an-tai** (50 houses) on r.
17	Tributary and camping-ground for 1 brigade on r. Country on both sides flat. Banks steep, 10 ft. high. Route turns l. 2 small islands.
17½	Route turns r.

miles	
18	**Kwai-t'ao,** market town of 400 houses on l. (See Route 65, mile 19¾.) Transport for 200 men available. For type of boat, see p. 447.
19	*Kwai-t'an*, rapids. Width of river, 450 yds. General depth, 4 to 5 ft. Speed of current, 6 knots. Banks steep. Stone bridge over *Kwai Shui*, tributary on l. : six 24-ft. spans ; height of span, 6 ft. Rise and fall small. Fierce rapid under this bridge.
20½	**Yeung-kwai** (40 houses) on l. ; **Yeung-p'un** (40 houses) on r. From here a main trade road goes off l. into the Yiu country. It is 8 *li* (about 2½ miles) to the first village 800 ft. up in the Yiu mountains.
22	Rapids, 6 to 7 knots. Island.
23¾	**Kêm-ts'ün** (40 houses) on r. Banks easy on both sides.
24	Tributary on l., 100 yds. broad, flowing about 5 to 6 knots.
25	Southern branch of the *Yeung-k'ai River* on l. which divides round a large island that does not affect the main river ; this branch is crossed by a 7-span bridge of stone and wood, 6 ft. high above mean water level ; clear span 35 ft. There is a very strong rapid under this bridge, and the main river current is also very strong at this point.
25¼	Northern branch of Yeung-k'ai River, crossed by a 5-span stone and wood bridge 220 ft. long, with heavy stone piers similar to above. Boats cannot ascend these streams, and the footpaths along their course are often precarious.
25½	**Yeung-k'ai,** large market town of 500 houses on both banks.
26	**Kou-mei-t'ao,** village of 50 houses on r. surrounded by 10-ft. wall. Village of 15 houses and good camping-ground for 3,000 to 4,000 men on l. Rapids.
27¼	**Kwai-p'ing** (40 houses) on r. Breadth of river 400 yds. Depth 8 to 16 ft.

miles	
28	Island.
28¾	River turns l. General direction to Lokchong, NW. **T'ien-hau** (60 houses) on l. Country flat.
29¾	**On-hau** (40 houses) on r. 4 in. fir trees. Camping ground for 1 brigade.
30	Tributary, 80 yds. broad, on r. **Nai-shui-ts'ün,** village on l.
30½	**Sheung-nai,** market village of 300 houses on r. Country well wooded with fir. Transport for 300 men available. Camping-ground for 2 battalions on r. Current 7 knots. Ferry.
31¾	**Sên-lou-ts'ün** (60 houses) on r.
32	Route bends r. and then l.
33	Rapid, with speed of 6 knots.
35	**LOKCHONG,** P., district city on r. (see *Gazetteer*). Width of river 300 yds. General depth 15 to 20 ft., least depth 5 to 6 ft. 7-knot rapid above the town. Water transport for 800 men available.

Lokchong will be a station on the Canton-Hankow Ry., and will be distant from Canton by rail about 181 miles. It is the last large town before the Kwangtung-Hunan border is reached, and is probably the point where the railway will leave the Wu Shui. Lokchong consists of two towns, the old and the new; the former, lying to the N., is walled and includes the *Yamen* and residential part. There are stations of the English Wesleyan and Kiel Missions here under native pastors.

ROUTE 62

LOKCHONG TO PINGSHEK

Water Route (40 miles)

Authorities: Lieut. R. M. Crosse and 2nd Lieut. Blagrove; War Office map of the Kwong Tung Yueh-Han Railway (no. 443), 1914; War Office Provisional Map of the Province of Kuang-Tung, 1911; Chinese map of Kwangtung, 1879.

General direction NW. In addition to the water route, there is a little-used road which follows the river, often forming a towpath.

Twenty-five miles of the journey is through a gorge, the cliffs of which rise from the water's edge at a slope of 2/1 to a height of 800 to 1,200 ft. Behind these, the mountains rise to 2,000 and 3,000 ft. The slopes are covered with thick jungle and fir, and are so impassable that the railway survey was nearly abandoned owing to difficulties in using a theodolite. The gorges offer nothing but a continuous series of difficult rapids, almost cataracts. In some cases the difference of water level is as much as 4 ft. in 300 or 400 yds. Many boats are wrecked annually in ascending and descending. Three days are required to cover the distance on the upward journey.

The district is only inhabited by a few foresters. It is of interest as a forestry centre which supplies a vast quantity of fir poles and planks to the Canton district and the neighbouring parts of the province. All the large rafts seen below Shiuchow come from here.

There are no suitable camping-grounds in the gorges.

For notes on transport, resources, and supplies, see pp. 447–9.

miles	
0	**LOKCHONG,** P. Route starts due W. Tributary from r., 30 to 40 yds. broad.
1	Small rapid, current 6 knots, shallow in centre.

miles	
1¾	**Sam-fat-miu** (20 houses) on l. Width of river 250 yds., depth 30 ft. (April), current 4 to 5 knots. Surrounding country fairly flat.
2	Depth of river, 2 to 5 ft.
2½	Tributary from l. Route bends r.
3	*Fu-hau-hap*, gorge 150 to 200 yds. wide. Depth of river 70 ft., banks steep. Main road follows bank on r., 100 ft. high.
3½	Rapid : current 8 knots, least depth of river 2 ft., breadth 150 yds. and 60 yds. on either side of an island.
4	Rapid, 6 knots. Bridge on r. over small tributary. Direction now NNW.
4½	Current 6 knots. Wooded jungle with 4 in. timber on both sides.
5	Rapid : depth of river 18 ft.
5½	Village of 20 houses. Hills 800 ft. high ; tree-cutting on the hillsides at 600 ft.
7	General direction N. to mile 13½.
9	**Sin-hü** (10 houses) on l.
9½	River very deep, current 3 knots.
10	Current 5 knots.
10¼	Waterfall on r. Breadth of river 150 yds., current 4 knots. Surrounding country hilly. Banks of river bad for landing.
11	*Hai-t'an*, rapid : current 8 knots. Breadth of channel 60 ft., least depth 4 ft. Wood piles on hillside.
12	Rapid : current 8 knots. Shingle bank.
12¾	Tributary 10 ft. wide on r. Country thickly wooded on both sides. Opening in the hills on r., 250 ft. wide, 60 ft. above the level of the river.
13	**Wang-ho** (20 houses) on l. Anchorage for 20 sampans. Least depth 5 ft.
13¼	Tributary from r. 10 yds. broad. Camping-ground on r., about 1 acre. Stony island 200 ft. long,

miles	
	covered at high water. Least depth of water 3 ft. Surrounding country wooded on l., bare hills on r.
13½	Gorge with small mountain stream on l. Current 5 knots.
13¾	**Siu-tan-hang** (15 houses) on l. Transport available for 20 men.
14½	Tributary from r. General depth of river 12 ft., least depth 3 ft. Rapids.
15	**Koi-mon** (20 houses) on r. Rapids. Transport available for 50 men.
15¼	*Pak-mau-leung* (Chinese map: *Pak-mong-leung*), rapid: current, 8 knots; least depth 3 ft. Route bends l. and goes W.
15½	*Kan-leung*, rapid: current, 9 knots; least depth 3 ft.
16	**Kam-fung-hang,** village at mouth of tributary from r. Width of channel 100 yds., current 5 knots. Banks impossible for landing. Opening of 150 ft. on l.
16½	Rapid.
17½	**Lou-fu-cheung** (20 houses) on both banks. Width of channel 150 yds., current 4 knots. Surrounding country a little less steep.
18½	Rapid: current 7 knots.
19½	**Pak-ki-t'an-hau** (35 houses) on l. Route bends l.
21	**Sz-tung-t'au** (20 houses) on l. Current 9 knots. Country more bare. Direction SW.
23	Island 80 yds. long; width of channels, 100 ft. on l., 200 yds. on r., depth 10 ft., current 9 knots.
	Sz-seung rapid, ½ mile long, rise of 3 ft.
24	Route bends l. and then r.
	Rapid current, 7 knots. Depth 15 to 20 ft. Surrounding country wooded. Banks impossible for landing.
24½	**Yuen-lok** (15 houses) on l. General direction to mile 29½, WNW.

miles.	
24¾	Tributary from l., 150 ft. broad.
25½	*Tai-chung-kok* rapid: width of channel 100 yds. Current 10 knots.
26	**Sen-ch'ung** (10 houses) on l. Width of river 150 yds.
26½	Temple. Width of river 250 yds. Above this point there are no rapids of note. The river is very deep here.
27¼	**K'uk-sha** (10 houses) on l.
27¾	Hills drop to 200 ft. on r. and 50 ft. on l. Banks easy. Good camping-ground for 1 battalion on r.
28¼	**Lou-ka-tou** (Chinese map: Lo-tu-sz), market village of 50 houses on r. Ferry for 10 men at one time. This is the ferry on the main road from Lokchong to Pingshek.
28½	Tributary 150 ft. wide flows in on r. from **Tin-tao,** 5 miles distant.
29½	Small tributary 10 ft. wide on r. Route bends l.
29¾	**Yeung-t'an** (10 houses) on l. Current 3 to 4 knots. Direction S.
31	**Kou-p'ou** (45 houses) on l. Route makes a right about turn.
31½	Small tributary 20 ft. wide flows in on r. Country consists of isolated low hills interspersed with cultivation. Banks difficult.
32	**Wong-ts'un,** village a few hundred yards distant on l. Direction now due N.
33	Route bends l. and then r.
34	Grassy island covered in high water season. Channels on either side 80 yds. wide. Country is very poorly populated.
37	Branch of river flowing past **Kwai-t'ong** (5 miles distant) and **Pak-sha** (¾ mile distant) joins on r. Breadth 250 yds. Grass-covered hills, 50 to 70 ft. high, on both banks. Direction W.
38¼	Island. Channels 80 and 90 yds. wide respectively.

miles	
39	Village of 40 houses on r. Transport for 40 men available. Ferry accommodating 40 men at one time.
40	**PINGSHEK,** P. T., market town of 300 houses. Inhabitants mostly Hunanese. About 60 boats available for transport.

ROUTE 63

PINGSHEK TO ICHANG HUN

Land Route (12·2 miles)

Authorities: Lieut. R. M. Crosse and 2nd Lieut. Blagrove; War Office sketch map of Route, 1914.

General direction NW. This route was in former times part of the main trade route from Hunan Province to Shiu-chow, and was used by muleteers to a very large extent. The mules carried rice, tobacco, and tea. Now, no mules are seen and the merchandise is carried by coolies. The defile at mile 8 renders it a difficult route, but it is probably the best in the vicinity. The railway will find its location well to the west, joining and crossing this route just short of Ichang. There is good camping-ground for 2 brigades on the hills immediately S. of Ichang. Water is abundant.

Distances were measured by pedometer, and are approximate only.

There is an alternative water route which is used when there is sufficient depth of water. The winding course of the Wu Shui is followed for 6 or 7 miles above Pingshek, after which a journey of 10 to 12 miles up its tributary the Chang Shui brings one to Ichang Hun. The Chang Shui is not marked on the War Office Provisional Map.

For notes on transport, &c., see p. 448.



STEPS UP HILLSIDE, ROUTE 63

miles	
0	**PINGSHEK,** P. T. Immediately after leaving Pingshek a steep hill with a gradient of 1 in 15 is crossed. The road is 4 ft. wide and stone-paved in parts. At the top of the hill fir trees 4 in. in diameter are found.
1·3	Road narrows to 2 ft. Branch road to l.
1·5	600 ft. above level of Wu Shui at Pingshek.
1·7	Steep down grade of 1/7 ; after short grade of 1/6 up there are some steps. Breadth of road 4 ft. From here to mile 2·2 grade is all downhill, varying from 1/15 to 1/5.
2·4	**Pa-chü,** village of 30 houses on l. 450 ft. above Pingshek. Here the bottom of the hill is reached. Road is 4 ft. wide and level, and a branch road goes off l. A little farther on a road branches to *Lung-chu-miao*, a temple near the route on l. The valley in which the road lies is cultivated for rice.
2·75	Up grade of 1/20. Road 3 ft. wide and paved. General direction W.
2·95	Village of 40 houses on l. Branch road on l. Up to this point the country is very hilly. After Pa-chü, the road drops to the level of Pingshek at mile 3·9.
3·4	Road meets the *Chang Shui* (an affluent of the Wu Shui), which is here 200 ft. wide.
3·9	**Sam-kong-k'iu,** forming 2 distinct villages on r. and l., 150 houses in all. Branch road to l.
4·0	3-span stone bridge over *Chang Shui* : length of span, 60 ft. ; current, r. to l. ; general width of river, 80 yds. ; probable rise and fall of 5 ft. in wet and dry season respectively. Banks difficult. Route turns r. and runs along the r. bank. General direction to Ichang, N. by W.
5·7	**Shek-tsu-ling** (50 houses) on l. Road joins on r.
6·0	**Ngau-p'i-tung** (50 houses), 1,000 yds. distant to r.
6·25	Boundary between Kwangtung and Hunan, marked by a stone tablet.

miles	
6·35	Bridge: 1 stone span of 25 ft. over a stream flowing into Chang Shui. General width of stream 30 ft. Route now goes up l. bank of stream.
6·45	Village of 50 houses on l.
6·85	Village of 30 houses on r. From here the hills only rise to 200 ft., and are covered with 4-in. fir trees on l. On r. the hills are grass-covered. Paddy cultivation in the valleys. Road 3 ft. wide from here to Ichang.
7·4	Village of 25 houses.
8·00	Route enters a defile very difficult of passage and easily held. Cliffs 100 ft. high on both sides. At top of defile there is a defensible granite wall, 2 ft. thick.
9·5	End of defile. Hills on r. and l. 400 ft. high.
10·9	Suburbs of Ichang visible.
11·4	Bridge over Chang Shui: 2 stone arches of 75-ft. span. Width of bridge 9 ft. General width of river 80 yds., depth at low water 2 ft., probable rise 4 ft. Banks built over.
12·2	**ICHANG HUN,** P., South Gate. For description see *Gazetteer*.

ROUTE 64

SHIUCHOW TO YÜYÜAN

Land Route (28½ miles)

Authorities: Lieut. R. M. Crosse, Sept. 1909; Chinese Map of Kwangtung, 1879.

General direction W. The road is divided into stages (*t'ong*) which are nominally 10 *li* or 3 miles apart. Sometimes they are only 5 *li*, and sometimes the *li* vary in length, according to the nature of the country passed through. The stages are marked by stone shelters where tea and light Chinese refreshments may be obtained.

As the crow flies the distance is only 21 miles, but the road is very winding, having to skirt numerous high hills. As far as mile 13½, where the route crosses the Lung-kwai Shui, the general direction is SW. Thence to Yüyüan it is NW. The road is for the most part a rocky track, and going is very bad.

miles	
0	**SHIUCHOW,** P.T. RS. Route starts from Sai-kong-mei, a suburb of Shinchow on the W. bank of the North River. The road runs generally W. along the southern side of a long valley.
1	Road forks. Route follows right-hand road along the foot of the hills.
2¾	Rise of some 50 ft.
3	Route turns SW.
4	The road again crosses a 50-ft. rise, on the top of which it forks. The right-hand road leads to **Hao-p'ing** and **Yan-ts'un ;** the left-hand road, which the route follows, to **Lungkwaihü** (P.) and Yüyüan.
6	Route passes between two villages.
6½	Road leads S. of and close under the *Yeung Shan,* hills about 500 ft. high.
7	Route crosses a small stream 20 ft. wide.
9	**Muk-k'ai,** small village ½ mile to l. Road very winding. It now leaves the Yeung-shan valley and turns up another valley. Hills on r. 500 ft. high, on l. 200 ft.
11	**Cha-tsui,** small village.
12	**She-chu,** small agricultural village. Road now bears r. and follows a valley about a mile broad, whence the *Tung-ku Shan* (see Route 57, mile 52½) can be seen.
13½	**Ma-t'o,** village on l. bank of the *Lung* (or *Lung-kwai*) *Shui*. Ferry across river, which is here about 8 ft. deep. Two ferry boats usually on the Ma-t'o side of the river. They would accommodate about 20 men each. The breadth of the river at this point

miles

is some 70 yds., but small landing-stages have been made, reducing the distance to be crossed to about 50 yds. Route now turns NW., leaving the village of **Lungkwaihü,** P. at a little distance to l.

14¾ **Ham-sz-ts'un,** small village situated in a wood. An ingenious device for irrigation is employed here. It consists of a water-wheel, carrying alternately paddles and pipes. The pipes are set on the periphery of the wheel, so that they hold water until they arrive at about a foot from the top of the wheel, when the water is poured into a trough which carries it into the fields. The river itself rotates the wheels by means of the paddles.

17 **Lo-tsai-song,** village. Route recrosses Lung-kwai Shui by ferry. There are 2 boats accommodating 30 men each. River about 6 ft. deep and 70 yds. broad. Road follows l. bank of river, but is hidden from it by trees and scrub.

21 **Shui-kwan,** small village on l. bank of the Lung-kwai Shui, just under the N. end of the T'ung-ku Shan, which rises 330 ft. above the village. Small police station for the collection of likin.

After leaving Shui-kwan, road turns into a valley ; hills on N. 400 to 660 ft. high ; on S., 200 to 300 ft. high. Valley generally about 1 mile broad.

25 **Chih-tsz-kong,** village ¼ mile to l. Hills on S. 200 ft. ; on N., 500 ft. high. SW. by S. are hills rising to 800 and 900 ft. in the middle distance, and 1,200 ft. in the far distance.

26 **Lung-shun-kong,** village. Road meets river.

26½ **T'am-t'ao-ts'un,** village on near bank of river. Ferry. Near the village on the far bank of the river is a good grass-covered camping-ground, sloping gently towards the river. Half a mile above, the river is fordable.

After T'am-t'ao-ts'un, road runs NW. over a dry

miles	
	shingly hill covered with fir trees 5 to 6 in. in diameter. Plain then opens out to a breadth of 2 miles on near bank of river, and ½ mile on far bank. Plain well cultivated ; crops chiefly rice.
27½	Route crosses cobbled road, 5 ft. broad, connecting **Lao-tsun** (on river bank) and **Ta-fu-toi** (1 mile NE.). Half a mile SW. of this road is a large market accommodating 1,000 people.
28	Road meets river on l.
28½	**YÜYÜAN,** P., district city. For description see *Gazetteer.*

ROUTE 65

YÜYÜAN TO KWAI-T'AO

Land Route (19¾ miles)

Authorities : Lieut. R. M. Crosse, September 1909 ; Chinese Map of Kwangtung, 1879.

General direction NE. This is the most direct route from Yüyüan to the Wu Shui. It is divided into stages as in Route 64, but they vary considerably in length. There is plenty of wood to be procured on the route, mostly fir. Cultivation is mostly paddy.

Over the Kwai Shui (mile 16) is a good bridge.

miles	
0	**YÜYÜAN,** P. For the first ½ mile the route lies alongside the river (see Route 64, mile 28), and the first stage is passed ½ mile outside the city. The route then leads up a valley with hills 200 ft. high on the S. and 150 ft. high on the N.
5½	**Fan-t'ao,** small village on r. From here the country rises, and for a mile the road passes over a dry waste some 50 ft. above the plain as far as Ao-tsun.

miles

6½ **Ao-tsun,** small village. Plain about 3 miles broad, and watered by a small rivulet. The route thus far has run practically parallel to the *Wan-mun Shan*, mountains which rise to a height of 2,000 ft. To the E. is the *Ngan-kong Shan*, a small range running NNE., consisting of steep and rocky semi-isolated hills about 400 ft. high, and sparsely wooded. Cultivation in the valley is chiefly rice.

8 Route now leads over low grass hills. Fir trees up to 9 in. in diameter.

10 **Yat-luk,** village on the slope of a small hill. The English Wesleyan Mission has a station here under a native pastor.

Main road to **Yanwohü** (P.) and **Lokchong** branches off on l.

For the first ½ mile after Yat-luk, the road leads over the hill on which the village is built. It then descends into the plain for ½ mile past a small village on l.

11 Country rises slightly. Route passes through a wood 3 miles long, with clearing in the centre. Just past edge of wood is a small village on l.

15 **Yê-tsun,** small village amongst large fir trees. Valley narrows to ½ mile ; on l. the *Yiu Shan*, on r. a low range of hills 100 ft. high.

16 Route crosses *Kwai Shui* by a good bridge, 150 ft. long, 4 ft. wide, stone abutments, 3 stone piers ; level roadway of 5 in. timber, 15 ft. above water. From the Kwai Shui to Kwai-t'ao, route leads over paddy fields alternating with dry ground.

19¾ **Kwai-t'ao,** large village on the r. bank of the Wu Shui, 18 miles above Shiuchow, and 17 miles below Lokchong. (See Route 61, mile 18). By road, Lokchong and Shiuchow are both about 11 hrs. distant, the road lying along the l. bank of the river. At Kwai-t'ao there is a branch of the English Wesleyan Mission under a native pastor.

ROUTE 66

KONG-HAU TO LINCHOW

Water Route (98 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 8; *China Sea Pilot*, vol. 3; Admiralty Chart no. 3218; War Office Provisional Map of the Province of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879.

General direction NW. This route goes up the Linchow River, which rises on the NW. border of Kwangtung and flows for over 100 miles through mountainous country into the North River about 10 miles below Yingtak. For the greater part of the distance, the river is hemmed in on both sides by high hills that come down to the water's edge; these are not as a rule continuous chains, but rounded hills and peaks with valleys and ravines intervening. At intervals, however, they narrow into gorges, namely, the Pak-yeung Shui Pass (mile 9½), Ts'at-li Pass (mile 22), Wong-mau Pass (mile 40), Sam-hap Pass (mile 48), Lung-nga Pass (mile 74), Tai-li Pass (mile 85), Tung-hau Pass (mile 87), Cham-t'au Pass (mile 89), Yeung-t'iu Pass (mile 91½), and Ma-miu Pass (mile 95). Above the Pak-yeung Shui Pass, and again above the Ts'at-li Pass, the country opens out into plains of considerable extent, and Linchow itself is situated in a wide and fertile plain.

The principal towns along the route are Hamkwong (mile 30), Samkong W. (mile 36), Taiwan (mile 46), Tsinglin (mile 61), and Yeungshan (mile 72), and the chief affluents, on the left, the Shui-pin Ho, Ts'at-kung Shui, and Pak-fu Shui, and on the right, the Pak-yeung Shui and Tsinglin River. All these streams are navigable for some distance by small boats. There are many rapids throughout, but more especially between Hamkwong and Samkong W., just below Taiwan, between Shuikow Tung and Yeungshan, in the neighbourhood of Siukong, and at the head of several passes.

Large vessels can ascend the Linchow River without

difficulty to the first rapid (mile 9½), the breadth of the river being about 250 yds. H.M.S. *Moorhen*, of 2½ ft. draught, which tried in 1903 to ascend the river beyond this point, only got 23 miles up owing to the tortuousness and narrowness of the channel.

Roman Catholic missionaries have for some years past had stations all along the river, and recently American missionaries have established themselves at Linchow.

No two maps agree as to the location of most of the places on the route. The distances given below, except for the first 9½ miles, are based on very slender authority and, in some cases, even approximate correctness cannot be guaranteed.

miles (approx.)	
0	**Kong-hau,** small village on the l. bank of the Linchow River at its junction with the North River (see Route 56, mile 13). Route goes NW. between hills thickly wooded with pine and other trees. At the foot of nearly every hill, and at the mouth of every little stream, are anchored large wood-boats gathering cargoes of firewood for transportation to the south. River is winding, and its breadth varies from 200 to 300 yds. Depth of channel up to mile 9½ never less than 12 ft. at low water.
1¾	Small stream and village on l. **Le-ye-sa,** village on r.
2½	**Ha-po,** market village reached by a narrow foot-bridge over a small stream to E., and walled in by a grove of bamboos to N. and W. River now flows between red clay hills covered with trees and shrubs, and sometimes with patches of cultivated land extending to their very tops. Numerous lime-kilns along the banks, and occasionally small stretches of level ground used for rice cultivation.
3¾	**Wong-ti,** hamlet at the foot of a cliff 200 ft. high on r. Bamboos on both banks.
4¾	**Tau-hi,** village on r.

miles (approx.)	
5	Small creek on r. Direction W.
5½	**Ku-mu,** hamlet on l. Low wooded hills on r.
6¼	**Pak-lan-hü,** village on l. Route turns r. Bamboos on l.
7	Creek on r.
7¼	**Sin-she-hi,** market village on r., with grove of tall pines behind. Route turns l. and goes W.
8	**Siu-she,** village on r. Low wooded hills and terraced paddy fields on l. Bamboos on r.
8½	*Shui-pin Ho* (or *Wong-chai Shui*) flows in on l. from the SW. There are three market villages on its banks, of which **Shui-pin** is nearest the mouth. A large number of small light-draught boats bring down wood and other produce from the hill country through which it passes. The people in this valley are all Puntis.
9¼	Small island. Channel to N. Group of craggy limestone hills.
9½	Rapids at the foot of the *Pak-yeung Shui Pass,* which is about 5 miles long and in the form of a semi-circle. Smooth grass-clad hills on both sides. Route turns sharply r. and then bends l. A footpath goes off on l. to **Sai-ngau-t'am** (mile 18), crossing a depression in the hills and shortening the journey by several miles. On the descent it passes near a fort still in good repair, with conspicuous white walls.
12	*Pak-yeung Shui* flows in on r. through a valley broadly open to the N., but walled in on the E. and W. by rocky cliffs running to a sharp point at its southern extremity. In this valley are 5 or 6 villages, including the market village of **Chuk-t'in.** The stream is deep, with numerous rocks rising in its bed. The entrance is masked on the SE. by a low hill.
14½	Rapids at head of pass. Temple in grove on r.

miles (approx.)	
	Route now enters the plain of *Sai-ngau* from the NE., curving W. and then N. Plain about 6 miles in diameter, encircled on all sides by hills. The whole of it is under cultivation, chiefly rice, sugar-cane and pea-nuts, and dotted with numerous villages. Population consists of Hakkas, well-disposed to foreigners.
18	**Sai-ngau-t'am,** small market town.
21½	Island and rapids.
22	*Ts'at-li* (Seven Li) *Pass*, about 2 miles in length, running N. and S. The walls of the pass are composed of mound-like hills, without trees or shrubs. River deep and smooth.
24	Route emerges from pass and enters another broad plain lying chiefly on the N. side of the river and largely given up to the cultivation of sugar-cane.
27	**Wu-tsui,** small market village.
30	**Hamkwong,** P. (Kuang-k'ou-ssŭ on Provisional Map, where it is wrongly placed between Ma-po and Taiwan), town of about 20,000 inhabitants in centre of plain. Bridge of boats at Custom House, where boats are held up to be examined. Sometimes, when the throng of boats is great, a delay of many hours may be caused. The Roman Catholics and American Presbyterians have mission stations here. The people are said to be rude and quarrelsome. Within a radius of 10 miles there are six or seven market towns, some of considerable importance.
	After Hamkwong, there are several rapids.
36	**Samkong W.,** P., market town on r. From here a footpath leads to Taiwan through a cluster of hills, full of caves of remarkable formation and covered with vegetation of great variety.
40	*Wong-mau* (Yellow Reed) *Pass*. Hills smooth and regular, water deep and quiet. There is much fishing with cormorants, from light bamboo rafts.

miles (approx.)	
	Beyond this pass, the level space of cultivated land on each side of the river widens again, broken into by hills on E. and N. and walled in by a semi-circle of higher hills on S. and W.
45	**Ma-po,** market village on l., with well-preserved stockade fronting the river, and fine tree-clad hills rising behind the village.
	Unusually stiff rapids in the next ½ mile.
46	**Taiwan,** P. (pop. 10,000), situated on a great bend of the river at the mouth of a small tributary on r. To the E. of the town there is a thickly wooded hill, with temples among the trees. There is a Roman Catholic Mission here. with a foreign priest residing in the town.
48	Rapid with strong current at the foot of the *Sam-hap Pass,* the dividing line between the Yingtak and Yeungshan districts.
49	Narrow gorge, ¼ mile long, dividing the hills on l. with a small stream flowing down it. On emerging from Sam-hap Pass, the country is mountainous. A dozen or more rugged peaks, united at the base, stand close to the river banks.
54	**Ling-kwai,** village a little distance away on l. at the foot of jagged rocks rising several hundred feet almost perpendicularly from the plain. Cascades to E. and W. of the village.
55	Hills come down to the river. *Kwai-lung* rocks, steep cliffs on r. rising vertically from the water's edge, with many small caves.
57	**Lin-chow-ping,** village on l. with high cliffs behind. Beyond this are two conspicuous peaks standing side by side.
58	A remarkable rock on l., known as 'The Fisherman'. It is about 150 ft. high, and leans over the water in a manner to suggest its name. The hills in this vicinity are covered with low shrubs.

miles (approx.)

59 'Fortified Cliffs', reached by half-an-hour's climb up a mountain path on r. Here is a walled enclosure about 100 yds. square, more or less filled with rocks and boulders, between two cliffs of unequal size, both perforated with several caverns. The smaller cliff is fortified to the top, and forms a safe and excellent look-out, its isolated position giving it full command of the valley below. This mountain fortress has from time to time served as a refuge to the people from hostile soldiers and robber bands. It is now much out of repair, the gates are gone, and the walls are crumbling; the enclosure is used for maize cultivation. Across the river is another cave in the side of a massive cliff, with a high stone wall obstructing the entrance.

61 **Tsinglin,** P., market town on r. with several thousand inhabitants, and the centre of a considerable trade. A stream navigable for small boats comes in on r. At this point the route turns nearly S. and continues in this direction for the next 6 miles. Ridge of grey cliffs on r., inaccessible from the river. Series of tower-like cliffs on l., most of them covered with evergreen shrubs.

67 Route turns NW.

Shuikow Tung, P., market town at the junction of the *Ts'at-kung Shui* on l. The overland courier route from Canton to Linchow via Tsingyün passes down this stream. The journey takes 6 days, 4 from Canton to Shuikow, and 2 from Shuikow to Linchow. (See Route 55, mile 50¼; also Route 47, mile 84.) On r., beyond a stretch of level fields, several peaks rise abruptly to a great height. A rocky path leads up a ravine to an opening between the hills which forms a gateway into the region beyond. From this pass there is an excellent view of the whole Ts'at-kung valley.

miles (approx)

For some distance now the hills do not approach so near the river. Route passes numerous villages surrounded by fertile fields and immense water-wheels used for irrigation. Rapids become more frequent: 'Scissors Rapid,' 'Little Tiger,' 'Big Tiger,' and 'Gurgling Sack.'

71 *Yeungshan pagoda* (9 storeys).

72 **Yeungshan,** P., small district city on r., with well-built wall and some fine public buildings. A number of temples and monasteries occupy prominent sites on the hills to the N. There is a Roman Catholic Mission here.

Shing-nam, market town opposite Yeungshan on l., in which all the business and trade of the neighbourhood centres. The people in this vicinity have the reputation of being honest and friendly to foreigners.

'Three Steps Rapid' in front of the city, and 'Eight Tribes Rapid' just above it. Route bends r. General direction N.

74 *Lung-nga* (Dragon's Tooth) *Pass.* Bed of river filled with large boulders that are rather dangerous to navigation. Group of lofty peaks on l., among them a mountain with two conspicuous dome-shaped peaks. 'Thunder Rapid' at head of pass. For several miles above this, the hills on both sides are high and precipitous. Very little land fit for cultivation.

76 'Blackbird' and 'Dog Tooth' rapids.

77 *Shing-sin-tung*, a magnificent cave ½ mile back from the river on l., and several hundred feet up the mountain side; height about 100 ft., depth from opening to farthest point explored about 100 yds., width somewhat less. Route passes several small villages.

miles (approx.)

79 **Siukong,** P., small town on r., much frequented on market days, at mouth of small stream up which a road leads to the market villages of **Wong-fan** and **Sai-kong.** Coal is mined in this valley. On l. is a conspicuous hill, thickly wooded for about ⅔ of the way up, with a fortified crest. Tigers and leopards are found in the vicinity of Siukong, and small deer and mountain fowl abound.

The course of the river here is much broken by rocks and rapids: 'Pine-apple Rapid' is just below the town, 'Noisy Drunkard' above it, and a little further up 'Confusion Rapid' runs abreast of a high hill with a footpath along its steep sides. Beyond this hill, the country opens a little, giving space for rice and corn among the lower hills.

80 *Wong-kam* rapids, difficult to navigate. River now makes a bend through a small plain.

81 **Shek-loh,** village enclosed by mud walls, with pea-nut oil factories.

River makes another bend. *Wong-ngau* (Yellow Ox) rapids. Old fort on r. Village on l.

General direction NW.

82 'Coffin rapids'.

83 Hot springs on l.

85 'Dragon Cave', said to be very extensive, with temple at its entrance close to bank on l.

Tai-li Pass: a high perpendicular wall of rock rising abruptly from the water on l.; rugged cliff with waterfall on r.

Above the pass are several small villages among groves of trees on each bank. The largest of these is **Kai-t'an,** just above a steep-walled cliff on r.

87 *Tung-hau Pass,* where the river flows in a narrow channel between bare cliffs. Several small caves difficult of access on l.

miles (approx.)

88 At the head of the pass, the *Pak-fu River* comes in on l. A market town of the same name is situated a few miles from its mouth. The stream is navigable by small boats for a distance of about 20 miles to the town of **Chaikong,** P. Cave and temple of *Kun-yam* on a rocky hill just below its junction with the main river. Well-wooded hill behind, and also on the opposite bank.

89 *Cham-t'au* (Pillow) *Pass*, with comparatively low walls. At certain seasons, six waterfalls descend 40 ft. into the river on r. Hills on either side covered with flowering shrubs.

91 **Lung-so-t'am,** village on r., with stream ending in three waterfalls, and crossed by footpath leading to Linchow. Several incense mills on its banks.

91½ *Yeung-t'iu* (Goat Leap) *Pass*, somewhat less than a mile in length. Through it the river flows in a narrow channel obstructed by heaps of fallen rock The sheer walls rise up 100 ft. and more, overhanging the water in many places. In the middle of the pass, a great mass of rock, called the Rock of the Genii, almost fills the stream. At the head of the pass, the wall on r. is the first to recede. Fine waterfall on l.

The river now winds among hills.

95 *Ma-miu* (Horse Temple) *Pass*, not a continuous narrow defile like the previous one. The walls are bare and precipitous, and the cliff projects several yards over the water on l. During freshets after heavy rains, the river sometimes rises 20 to 30 ft.

96 *Ma-mien-t'an* (Horse Face Rapid) at head of pass.

Linchow Pagoda, on a prominent hill rising abruptly from the bank on l.

Route now enters plain of Linchow, bordered by a range of high mountains to W. and N.

miles (approx.)	
98	**LINCHOW,** P. (see *Gazetteer*). *Sha-mo-ling* (Mandarin Hat Hill), high isolated peak overlooking city. Opposite the city, a small tributary, the *Ko-leung Shui*, comes in from **Lingshanting** on l. (see Route 67). The population includes several hundred Hunanese and a few Hakkas. The natives use an entirely distinct dialect of their own, but Cantonese is generally understood.

ROUTE 67

LINCHOW TO LINSHANTING

Land Route (28 miles)

Authorities : B. C. Henry, *Ling-Nam*, chap. 9 ; Chinese Map of Kwangtung, 1879.

General direction W. The first section of the route lies a short distance from the south bank of the Ko-leung Shui, a shallow turbulent stream filled with rocks and rapids and subject to sudden freshets, which in the season of drought dwindles to a mere brook. As navigation on this river is very difficult, the usual route to Samkong N. is by footpath across the fields and over some low-lying hills. The road between Samkong N. and Linshanting, which is one of the best in the whole province, follows the course of the river through a magnificent gorge. On this section of the route the Yiu country is traversed. The district lying to the NW. is inhabited by the *P'ing-ti Yiu* (' Yiu aborigines of the Plain ', a name formerly given to them when they occupied the low lands adjacent), who are considered less fierce and dangerous than the *Ko-san Yiu* or Highlanders in the south-east. Linshanting is a military station established for the special purpose of holding the Yiu people in restraint.

miles

0 **LINCHOW,** P. Route starts from the mouth of the *Ko-leung Shui* which joins the Linchow River opposite the town. For the first 15 miles the country is comparatively level, broad fields of rice and other grain filling the space between the river on r. and the hills on l. Route follows a footpath across the fields.

9 **Sha-tsz-kong,** guard station with grove of very fine trees near by. Many of the hillsides are covered with groves of the oil-bearing camellia. Route passes several large villages, one of which, **Lung-hau,** is especially conspicuous for its high, substantial wall.

15 Footpath reaches river opposite to **Samkong N.,** a town and military station of considerable importance on the borders of the Yiu country. The town is in two parts: the business quarter, in which a large trade centres, and the walled city, where the garrison is stationed and the officers reside. Busy throngs are to be seen here on market-days, including several hundreds of the Yiu people, both men and women.

Route now follows an excellent road along the river bank, and passes through a deep gorge which continues most of the way to Linshanting. High mountains, covered with verdure, on either side of the road.

28 **LINSHANTING,** P., military station in the midst of the Yiu territory. The road continues in a westerly direction to the border of Kwangsi, about 30 miles distant.

ROUTE 68

LINCHOW TO TUNGPI

Water Route (45 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 10; Chinese Map of Kwangtung, 1879.

General direction NNW. About two miles above Linchow, the river divides into two branches, the eastern and larger one leading to Singtsz and the other to Tungpi near the Hunan border. The present route ascends the latter stream, passing through country of great variety and charm. For the first 15 miles the river winds through a mountainous region, flowing over many shallow rapids, up which boats have to be dragged by main force. There are more than 20 dams on this section of the river, with only a small passage a few feet wide for boats to pass up or down. These dams are built diagonally across the stream, with large water-wheels set at their lower extremity for purposes of irrigation.

The boats on this river are all low and narrow, drawing but a few inches of water. Their chief business is to carry salt, and they are manned by people from villages along the river who combine farming with boating. They usually travel in flotillas of 20 or 30, and help each other over the rapids and dams, being hitched together by chains for this purpose. The channel left by the dams is too narrow for more than one boat to pass at a time, and the ascending boat has the right of way.

The market town of Shekkokhü lies in a plain several miles in extent and divided from the plain of Yung-shü by a group of hills. A small tributary flows in at each of these places, and five miles further up is the Ch'ung-hau creek, the last and largest tributary of the Tungpi River. Above this point the hills are much lower and most of them quite barren. Villages, however, are numerous, and Sai-ngon and She-kok-

tam are market towns of some importance. Navigation becomes increasingly difficult as the river is ascended, and the journey by water for the last 10 miles of the route is very tedious.

miles	
0	**LINCHOW,** P. Route goes up the Linchow River in a northerly direction.
2	*Hoi-ying-tsui* (Cormorant's Beak), a striking point of land standing in the angle of division between two branches of the river. Route goes up western branch, the *Tungpi River* (marked 'Huang Shui' on Provisional Map), which winds in a continuous succession of curves. Water very clear. Many shallow rapids, and over 20 dams in the first 15 miles. These dams continue with almost equal frequency all the way to the head of the stream. Banks in many places lined with trees. High hills on either side, through which footpaths lead to various towns. A few miles from the mouth of the river is a large temple erected in front of a deep cavern, called the Cave of the Dragon.
17	Country opens out into a plain several miles in extent on l.
	Shekkokhü, P., small market town near the river on l., with only one street, and no business except on market days. A conspicuous peak in the shape of a half-dome rises behind the town. At its base are smaller hills filled with caves. A small affluent joins here on l., with some 12 or 15 villages built against the hillsides and overlooking the valley, which is given up to rice cultivation. A few miles up this valley the mountain walls approach, leaving but a narrow space through which a path leads into the wild regions beyond, inhabited by Yiu tribes. Ten miles from the river are dense forests filled with large game of various kinds. On the N. side of the plain, and rising 1,200 ft. above it is a conspicuous conical

miles

hill, with several caves, and a large village at its foot.

On leaving the plain, route passes between a mountain wall on r., about 1,000 ft. high, and a line of lower hills on l., branching off from the main ridge behind and converging to a point near the shore. These hills divide the plain of Shekkokhü from that of Yung-shü; several of them near the river are covered with groves of large trees.

20 *Ha-lat Shan* (Crab Hill) on r., with a large natural doorway near the top, and a great mass of rock at its foot.

20½ A remarkable detached cliff on r., with a small temple in a cleft of the rock beside a narrow path running along the steep bank.

Soon after this, route enters another plain containing about 20 villages, most of them large and well-built, surrounded by substantial walls.

22 **Yung-shü,**[1] market village on l. in centre of plain, near the mouth of an affluent, the *Ta-lung Shui*, which flows out from a narrow gorge in the hills. Ten miles up this stream is a large settlement of Yius, engaged in the preparation of charcoal.

Hills now composed of black barren rock, and fewer trees. Villages still numerous, and trees with stacks of rice-straw built round them.

27 *Ch'ung-hau Shui*, the largest tributary of the Tungpi River, comes in on l. It flows down through a fertile valley containing some dozen villages, the chief of which is **Ch'ung-hau,** a remarkably well-built place with a high wall, gates like a city, and good public buildings. The valley is bounded by a mountain range on the SW. and a low ridge of hills on the

[1] In the Provisional Map, Shekkokhü (Shih-chio) and Yung-shü (Yung-shu-hsü) are both wrongly placed several miles up a small tributary of the Tungpi River.

miles

NE. Most of the villages have but one gate for entrance and exit, as a safeguard against robbers. Many of them are surrounded by fine groves of trees, especially camphor, oak, and chestnut.

31 **Sai-ngon,** an important market town, with large villages built close together on both sides of the river, and connected by a fine 5-arched stone bridge. Near the town is a fine temple called *Ling-shan-miu*, and beside it a large school called the *Man-wa* College. The hills about this place are much lower, and mostly barren. Coal is mined to a limited extent. Nearly all the land is under cultivation. A short distance above the town, a bold rocky peak, several hundred feet high, and covered with vegetation, rises abruptly from the midst of a smooth barren hill.

36 **She-kok-tam,** village with many warehouses, where salt is transhipped, to be carried through the plain of Ch'ung-hau, and over the mountains into Hunan, to the town of **Ma-t'au-po,** and thence by boat to **Yungchowfu.** Navigation becomes very difficult, owing to numerous shallows and rapids. A well-paved road leads from here to Tungpi, which is only about 5 miles distant by land.

45 **TUNGPI,** P., head of navigation and main centre of trade on the river. It is a large and prosperous town, with a broad substantial stone bridge spanning the narrow stream high above the reach of floods. The main portion of the town is on l., a long street with many excellent shops extending parallel with the river. The surrounding country is populous; there are probably not less than 25,000 people in the plain that stretches around Tungpi. 13 miles distant from this point is **U-kwong-tau,** the first town in Hunan, at the head-waters of the *Tao Kiang*, an affluent of the *Siang Kiang* which flows past **Kianghwa,** P. T.

ROUTE 69

LINCHOW TO SINGTSZ

Water Route (32 miles)

Authorities: B. C. Henry, *Ling-Nam*, chap. 10; Chinese Map of Kwangtung, 1879.

General direction NNE. This route leads up the main branch of the river above Linchow, which is nearly double the size of the Tungpi branch (see Route 68), but broken in the same way by rapids and dams. The river is generally winding, and the country hilly. There is a small pass at mile 6, and a much larger gorge at mile 19. Above this point, the route emerges into rolling country, with low hills near the river and high mountains to the east.

The only market town of any importance on the route is Ma-po-shui at mile 23, where a thriving business is done in pea-nut oil.

Distances are approximate only.

miles	
0	**LINCHOW,** P.
2	*Hoi-ying-tsui* (see Route 68, mile 2). Route goes up main branch of river on r., and for the first few miles keeps near base of ridge of which *Sha-mo-ling* (see Route 66, mile 98) is a spur. River winds between red clay hills. Banks covered with clumps of grasses 12 to 15 ft. high.
6	A small pass. Several conspicuous peaks on r., including one with caves. Good footpath along steep hillside on l. Beyond the pass are abandoned coal mines. River bends W. and back again to NE.
9	Small pagoda on r. A little beyond, is the large village of **Shui-hau,** the first anchorage for salt boats on their way up from Linchow.
	'*Pencil Rock*' *Hills,* a group of pointed peaks

miles

visible to l. In many places the hills are covered with trees and shrubs, especially the oil-bearing camellia, the nuts of which are collected in October and November. River obstructed by rapids and dams.

15 Small affluent comes in on l. It flows through a small plain, in the centre of which is the market town of **Po-on,** 2 miles from the main stream. At the eastern entrance to this plain is a large conical hill, with the stream flowing on one side, and a foot-path encircling its base on the other. Po-on is a walled town with several bridges across the small creeks that unite in front of it. The *Fuk-shan* monastery, situated in thick woods of oak and other trees, about 200 acres in extent, is half a mile N. of the town. Above this point, there are lofty hills on either side. Swift current.

18 '*Gander Rapid*', long and difficult of ascent. The water is confined into a narrow channel by two stone embankments, between which it rushes in a continuous fall for about 300 yds.

19 Route enters a fine gorge, through which the river winds in several curves. Hills on either sides covered with trees and vegetation.

On emerging from this, the last pass on the river, route enters a rolling country, low hills near the banks and mountains to E. River extremely sinuous.

23 **Ma-po-shui,** market town built on a bluff on the river bank, overlooking a pool of great depth. Twelve large oil factories. Many villages in the adjacent valleys, and extensive camellia groves on r.

25 Isolated limestone cliffs full of caves. High range of mountains some 15 miles away to NE.

In the last 5 miles before Singtsz, there are 13 dams. These are solid stone barriers built across the stream, with an opening 7 ft. wide for boats.

miles

31 *Singtsz Pagoda,* 7 storeys high, standing on a small barren hill. Several fine stone bridges.

32 **SINGTSZ,** P., head of navigation and large trading centre. The surrounding district is populous, comprising 20 to 30 villages. The dialect spoken varies considerably from that of Linchow, and also from the local patois of Tungpi and Po-on. At Singtsz the river divides into two smaller branches, and these again into brooks, several of which can be traced to their sources in caves. The country in the immediate neighbourhood is chiefly composed of low, barren hills, with mountains a few miles distant in every direction. To the N. stretches the *Shun-t'au-ling,* a massive but barren range; to the E. is the *Fung-t'au-ling,* over which a postal road leads through a corner of Hunan to **Pingshek** and the headwaters of the North River (a 2 days' journey); and to the S. of these, but distinct from them, the *Tai-pin-ling,* extending through the Yüyüan district towards the North River.

WEST KWANGTUNG

ROUTE 70

MASHUI TO SHIUHING

Land Route (106 miles)

Authorities: French 1 : 1,000,000 Map (Canton : 1900); War Office Provisional Map of Kuang-tung, 1911; Chinese Map of Kwangtung, 1879; B. C. Henry, *Ling-Nam*, chap. 5.

General direction NE. This is a continuation of the courier route from Kochow to Mashui (Route 71). It follows the course of two rivers—the Mak-yeung Kong and the Sunhing Kong, a tributary of the West River. The country is for the most part wild and mountainous, especially along the upper waters of the Sunhing River, but the road keeps to the river valleys. The valley of the Mak-yeung is described by Henry as rich in natural products and attractive scenery. In the hills lining the river there are numerous caves which have been used as places of refuge for the population. The Sunhing River is navigable by small boats to Hotowhü, and it is stated that Wongnaiwan is the head of navigation on the Mak-yeung River.

Distances have been measured on the French Map, and are approximate only.

miles	
0	**Mashui,** P. (see Route 71, mile 72). The route runs NNW. along the r. bank of the Mak-yeung River, which it crosses just below Yeungchun.
$6\frac{1}{2}$	**YEUNGCHUN,** P., a walled district city on the l. bank of the Mak-yeung River. Route now follows the l. bank of the river along the valley. General direction NW.

miles	
10	**Nio-kang,** village. Route crosses the *Pak-lung Ho*, a small tributary.
13	Route turns NNE.
15	**Kao-lio-shui,** village ½ mile distant on r. Route crosses a small creek.
18½	**Hsin-ts'un,** small village.
21	**Hopshuihü,** P., market village.
23	**Pak-ma,** village at the mouth of a small tributary on the opposite bank.
24	*Lo-fêng Shui*, tributary.
25	**Shekwan W.,** P., market village. General direction N.
28	Route crosses a tributary just above **Tam-kat,** a village on the opposite bank.
33	**Wongnaiwan,** P., market town at the head of navigation on the Mak-yeung River.
35	Tributary flowing down from mountains on E. which form the watershed between this and the Tamkong River (see Route 53). Route bends NE.
37	**Wunlum,** P., village near the headwaters of the Mak-yeung River. Route now crosses the watershed of the Mak-yeung and Sunhing Rivers, which are separated by the plain of Tintong. This plain is circular in shape, surrounded by hills, and given up almost entirely to rice cultivation.
44	**Tintong,** P., market town in the plain. Direction N.
48	**Hotowhü,** P., market town at the head of navigation on the r. bank of the *Sunhing River* (here called the *Lo-k'ai Shui*). Hotowhü is celebrated for its boatmen and boat-builders; and a type of river boat much used in this part and on the West River is known as the *ho-t'au* boat (see p. 69). The route follows the r. bank in a NE. direction.
57	**Lakchukhü,** P., market village on the l. bank of the river. Route crosses a small creek. The sur-

miles	
	rounding country is wild and mountainous, and said to be infested by tigers.
62	Route crosses a small tributary.
	Sun-ts'ün, village a little further on, on the opposite bank.
67	**SUNHING,** P. T., a walled district city in the centre of a large rice plain (see *Gazetteer*).
69	**Tung-hau,** village at the junction of a large tributary, the *T'ung-li Shui*, coming in from the SE., which is crossed immediately beyond the town. General direction ENE.
	Ch'e-kong, village on opposite bank of Sunhing River.
74½	Village (marked Hsin-ts'un on Provisional Map and Toung-tsin on French Map).
82	**Shuihowhü,** P., market village at the mouth of a small creek.[1] The route now runs almost due E.
91½	**Tai-kan,** village. Route crosses a small creek.
95	Route crosses to l. bank of Sunhing River, just above a long island.
96	**Taipinghü,** P., market village. Route follows l. bank of river, and crosses a small affluent.
101	**Sunkiu,** P., large village (not marked on Provisional Map).
103	**Lintong,** P., on the opposite bank.
106	**SHIUHING,** P. T. (see *Gazetteer*). The route ends on the r. bank of the West River opposite the city.

[1] The Provisional Map seems to confuse this stream with the T'ung-li Shui at mile 69, and erroneously marks a large town, 'Hsin-ning-hsin,' on its left bank.

ROUTE 71

KOCHOW TO YEUNGKONG

Land Route (95 miles)

Authorities: French 1 : 1,000,000 Map (Canton section : 1900) ; War Office Provisional Map of Kuang-tung, 1911 ; Chinese Map of Kwang-tung, 1879.

General direction E. No detailed information is available about this route. The country traversed is on the whole hilly. The last part of the route follows the l. bank of the Mak-yeung River, which is navigable for small boats.

Distances have been measured from the map and are approximate only.

miles	
0	**KOCHOW,** P. T., on the l. bank of the *Fau-shan Shui* (Fao-tan Ho on French Map). See *Gazetteer* and Route 74. General direction E.
3½	**Hong-fên,** village. From here the road passes over a range of hills running NE. and SW.
10	**Tung-shan,** village.
16	**Fenkai,** P., market village. Route crosses a small tributary of the *Kam Kong* or Muiluk River.
21	**Ngau-kok,** market village. Another tributary is crossed just beyond this village, and the route continues up the valley of the Muiluk River near the r. bank.
23½	**Yeungkok,** P., market village on l. ; **Sam-k'iu,** village on r.
28	Route approaches river on r., and crosses a small affluent. General direction ENE.
31	**Wong-hang** (Ho-tsai-hao on French Map), village near the mouth of a small affluent.
25	Another small affluent. Route now crosses Muiluk River and follows the l. bank up to its headwaters.
38½	**Shalong,** P., market village. Route now turns NE.

miles

and crosses the range of hills in which the Muiluk River rises.

46½ **Na-wong-shan,** village.

49 **Pat-kap,** market village. Route crosses a tributary (flowing r. to l.) of the *Ma-ch'ên Shui,*[1] and goes down the valley of the latter, keeping near to the r. bank. General direction NE.

56 **Pak-ma,** village near the junction of the Ma-ch'ên Shui with the *Sheung-kao Shui.* Route continues along the r. bank of the latter for about 2 miles and then crosses over to the l. bank. General direction E.

62 Route crosses a small affluent coming from the village of **Ku-leung.**

64 **Tamshui,** P., market village on l. bank of the Sheung-kao Shui.

66½ Route crosses a small affluent. **T'ai-p'ing-to,** village on l. bank of river. Route now leaves river and bends gradually round to N.

73 **Mashui,** P., market town on the r. bank of the *Mak-yeung Shui.* Here the road divides, one branch going N. to **Yeungchun** and on to the West River (Route 70), and the other turning SE. to **Yeungkong.** Route now crosses the Mak-yeung Shui and runs along the l. bank.

76 **Shan-hau,** village.

78 **Kongmi,** P.

81 Route crosses a small tributary.

82 **Na-tan,** village on opposite bank of the river, at the junction of the Sheung-kao Shui (see mile 56).

85 Another small tributary is crossed.

86 **Mashan,** P., market village on the river.

87 **San-shan** (Provisional Map : Hsin-chou), village on the r. bank of the *Taipat Shui* at its junction with the Mak-yeung Shui. This tributary flows down from **Taipathü,** P., some 15 miles to the N.

95 **YEUNGKONG,** P. T. (see *Gazetteer*).

[1] Marked 'Lin-ch'ên Shui' on Provisional Map.

ROUTE 72

NGCHÜNYÜN TO YEUNGKONG

Land Route (103 miles)

Authorities: French 1 : 1,000,000 Map (Canton section : 1900); Admiralty Charts 2062, 2212; *China Sea Pilot*, vol. 3.

General direction ENE. This coast route is a continuation of Route 73, which goes as far as Hwangpo on the west bank of the Kam Kong estuary. No details of the road are available, and the distances, which are taken from the French Map, are approximate only. The coast is for the most part low and sandy, with occasional hills.

miles	
0	**NGCHÜNYÜN,** P. (Wu-ch'uan-hsien), district city situated on a strip of land about 4 miles broad, midway between the estuary of the Kam Kong and the sea. Route starts NE. along the coast.
3	**Man-fong,** village on coast. Another village, **Ch'a-t'ing,** is passed on the l. about a mile further on.
10½	**Na-luk-kong,** village at the mouth of a small river. The road now lies inland to avoid a bend in the coast.
15	Route crosses a river about 2 miles from its mouth.
15½	**Liu-lu,** village.
22½	**Chai-t'au,** village W. of the mouth of a small river, Route approaches coast. *An-kang Shan*, 515 ft. high, with a steep cliff on its sea face, about 2 miles distant to r.
26	**Shuitung,** P. T. (see *Gazetteer*).
28	Route crosses a stream.
29½	**Hing-ning,** village W. of the mouth of a small stream.
33½	Small stream.
36	**Makong,** P., market village on the r. bank of a small river. The road here turns SE.

miles	
38½	**Yen-shan,** village.
42	**Ping-lan.** The road now runs E. and crosses a river near its mouth.
47	**Tinpak,** P. T., district city at the head of a small inlet (see *Gazetteer*). From here the road cuts inland across the base of a peninsula. General direction E.
48	Route crosses a small stream.
54	Route approaches coast, and crosses a stream.
57	**Shan-ts'in,** village on coast.
59	A fairly large river, the *Kai-t'au Ho* (*Wu-lan Ho* on Provisional Map) is crossed at about 2 miles from its mouth.
63	**Shü-ts'ün,** village on coast.
66	**Fuk-u-ts'ün,** village on l. bank of a small stream.
71	**Shek-mun,** village at the mouth of a stream, on the eastern bank. Route turns NE., following the coast.
74	**Shwang-shui,** market village on the coast.
80	**Shek-kong,** village at the head of a small tributary of the P'o-mi Ho. The road runs along the r. bank of this tributary to its junction with the main stream.
84	The *P'o-mi Ho*, a river of considerable width, is crossed about 3 miles from its mouth.
88	Route bends r. and meets the sea coast.
92	**Yeung-pin,** market village at the head of the estuary of a small river. Route crosses a range of hills. Direction NE.
100	**Fau-yang-ts'ün,** on the r. bank of the *Mak-yeung* River, which is about 3 miles wide at this point, and filled with large islands.
103	**YEUNGKONG,** P. T., on the l. bank of the river (see *Gazetteer*).

ROUTE 73

NIVET POINT (KWANGCHOWWAN) TO HWANGPO

Land Route ($15\frac{1}{2}$ miles)

Authorities: *Baie de Quan-cheou-wan*: *Carte provisoire dressée d'après les travaux des officiers de la marine et des troupes de la marine*, 1899; Chinese Map of Kwangtung, 1879.

General direction NE. The route runs more or less straight from the French port at Nivet Point, commanding the entrance to the Ma-ts'e River, to Hwangpo, 7 miles up the estuary of the Muiluk River. The country traversed is low and undulating, with numerous villages. The road is described as good as far as Po'-t'au (mile $6\frac{1}{4}$), after which it is the usual type of Mandarin road. The spelling of the French Map has been retained for place-names where any uncertainty exists as to the characters.

miles	
0	*Nivet Point.* The road runs NE. up the peninsula, and within a mile of the *Chenal des Aigrettes* on r. for the first 4 miles.
$\frac{1}{2}$	**San-hoan,** village on r. Another village on l.
$1\frac{1}{4}$	**Ma-ts'e,** village and fort on r.
$1\frac{3}{4}$	**Pa-tze,** village from which paths run SSW. to Ma-ts'e and SE. to the coast, which is here about 500 yds. distant.
$2\frac{3}{4}$	**Tong-tong-mei,** village. For the next $1\frac{1}{2}$ mile route passes through a number of small villages.
$4\frac{1}{4}$	Slight descent, followed immediately by a rise.
5	**Mi-kao,** village on a low hill. Road runs over undulating ground.
$6\frac{1}{4}$	**P'o-t'au** (Po Dao on the French Map), market village on the crest of a small hill (see *Gazetteer* under Kwangchowwan). Two brick arches and a pagoda are the conspicuous points of the town. The road is flat and straight for 2 miles, passing a series of small villages.

miles	
$8\frac{3}{4}$	Road passes over a small hill.
$9\frac{1}{2}$	**Sian-lin,** village on l. Country rather more hilly.
$9\frac{3}{4}$	Boundary of French leased territory.
$10\frac{1}{4}$	Route passes several villages and crosses a hill.
11	**Pin-tsian,** village in depression on l. The road here is winding.
$12\frac{3}{4}$	**Lok-tsien,** large village. Road straight again.
$13\frac{3}{4}$	**T'uan-to-chên,** village.
$15\frac{1}{2}$	**HWANGPO,** P., a considerable town stretching southwards along the estuary of the *Muiluk River.* On the opposite side, and about 3 miles from the estuary is the district city of **Ngchünyün** (see Route 72). Just outside Hwangpo the road is joined by another which comes in on l. from **Ma-poum,** a village on the Ma-ts'e (Matshe) River about 12 miles distant.

ROUTE 74

KOCHOW TO SHUITUNG

Land Route (35 miles)

Authorities: Lieut. R. M. Crosse and Lieut. C. C. Chambers, February 1913; War Office Sketch Map of Routes Limchowfu–Kochow–Shui tung, no. 442 (1914); Chinese Map of Kwangtung, 1879.

General direction S. by E. This is the land route from Kochow to the harbour of Shuitung, whence there is a thriving trade with Tinpak and Kongmoon. The road itself is the usual carrier's road, 3 ft. wide, except in certain portions, where carts are used locally. The country alternates between undulating down-land and plain; there is a considerable amount of rice cultivation, but tobacco is the outstanding crop. Water is scarce, but sufficient for bivouac purposes. Among the rivers crossed is the Kam Kong which joins the Kochow river close to Muiluk.

The telegraph line from Kochow to Shuitung runs parallel to the route, on the right hand side for the greater part of the way.

miles	
0	**KOCHOW,** P. T. (see *Gazetteer*). The cart-road through the southern suburbs is 10 ft. wide. Wheelbarrows are much used. After crossing Kochow bridge (see Route 75, mile 132·7) the road is 5 ft. wide and paved, and winds among the hills for ¼ mile. Branch road on r. to **Fachow** along the l. bank of the *Fau-shan Shui* (see Route 75).
·3	Road narrows to 3 ft.; gravel surface. Rice valley.
·8	Rise of 1/20 for nearly ½ mile. Branch road on l.
1·2	Crest of rise. Road goes through a pass 100 ft. high. Steps of granite are used near the top on either side.
1·4	Down grade 1/8. Gravel surface. Telegraph line crosses from l. to r.
2	Branch road on r. to **Muiluk.** Road broadens to 5 ft., with cart tracks. From mile 2 to 7 it passes through a flat rice plain some 7 miles broad.
3·4	Branch roads to r. and l.
3·8	**Ts'ing-shui-kong** (30 houses) on l.
4·9	**Shui-ts'ing** (20 houses).
6·1	**Pong-shan-ling** (40 houses).
6·7	Stone bridge over a tributary of the Fau-shan Shui, 30 ft. long, 3 ft. wide, with three 8-ft. spans; 2 to 3 ft. of water in dry season. Current l. to r.; banks steep. A cart track goes through the stream.
7·5	Village of 40 houses on l.
7·8	Road broadens to 7 ft. and crosses downs sparsely covered with coarse grass.
8·5	Stone bridge, 30 ft. long, 3 ft. wide, with two 8-ft. spans and one of 10 ft. Stream almost dry in winter. Road narrows to 3 ft. Camping-ground for 1 battalion about ¾ mile to l.





SHUITUNG HARBOUR

miles	
8·8	**Chentung,** P., market village of 150 houses on l., with mud wall enclosure. Branch road on r.
10·6	Village of 30 houses on l. Up grade 1/30 for 300 yds.
11·6	Village of 70 houses on l.
13·0	Village of 60 houses on l. Short rise of 1/30.
13·2	Top of downs.
13·8	End of downs. The downward slope is gradual until the original level of plain is reached. Road narrows to 3 ft.
14·3	Road meets a river on l. and follows its course. River is 100 ft. wide, with little water in dry season, and 2 to 3 ft. in wet weather. This river skirts the downs, and camping-ground should be found near it.
14·5	Low bridge 100 ft. long over river, which is dry in dry season.
15·0	Extensive tobacco cultivation.
15·8	Camping-ground for 2 brigades 300 yds. distant on r.
	Ferry, with accommodation for 24 men at one time. Width of river 200 ft., depth in dry season 3 ft. Current l. to r.; banks steep and sandy. 100 yds. down stream is a ford in dry season; depth 1 to 2 ft., current 1 knot; it probably could not be used in wet weather.
16·3	**Lok-ts'ün** (30 houses) on l. Branch road to l. Road now broadens to 6 ft.
17·7	Village of 50 houses and camping-ground on l.
18·0	**Lintongsunhü,** P., market town of 300 houses. After this the road narrows to 2 ft.
19·4	Branch road on r.
	Ferry over a branch of the *Kam Kong*, with accommodation for 24 men at one time. Width of river 200 ft., depth 2½ ft. in dry season. Current l. to r.; banks gentle and sandy. The river is dammed in several places, and at these dams troops could cross on foot in low water season, though the·

miles	
	dams would not stand large numbers. Probable rise of river is 3 ft. Camping-ground for 2 brigades on south or l. bank.
20·5	Two villages of 10 and 30 houses respectively. From here to mile 27 the road varies from a path 2 ft. wide through paddy to a cart track 6 ft. wide allowing 2 carts to travel abreast. Mountain of 2,500 ft. 10 miles to l. Flat plain on r.
23·8	Village of 10 houses. Hill 300 ft. high about 3 miles to l.
26·0	Village of 30 houses on N. bank of Kam Kong, here 100 yds. wide. Ferry with accommodation for 24 men at one time. Depth of water 4 ft. in dry season. Banks steep and 10 ft. high. Probable rise 5 ft.
27·0	Ferry over another branch of Kam Kong; accommodation for 20 men at one time. Width of river 250 ft., depth 5 ft. in dry season. Banks steep and 8 ft. high. Probable rise 4 ft.
27·5	Road emerges on to downs, where it is a track 6 ft. wide. Small fir trees. Waterless country.
27·8	Branch road on r.
28	Telegraph line from Kochow crosses route from r. to l.
28·8	Road passes between two low hills.
29·5	Village of 20 houses.
30·2	Branch road on r.
30·4	Telegraph line crosses route.
31·2	Village of 30 houses $\frac{1}{4}$ mile distant on l. Ground somewhat lower and cultivated. Road about 4 ft. wide.
31·8	Road broadens to 8 ft.
34·2	Village of 20 houses on l.
34·8	Telegraph line crosses to r.
35·0	**SHUITUNG,** P. T., seaport town of 500 houses (see *Gazetteer* and Route 72, mile 26).

ROUTE 75

LIMCHOWFU TO KOCHOW

Land Route (133 miles)

Authorities : Lieut. R. M. Crosse and Lieut. C. C. Chambers, February 1913 ; War Office Sketch Map of Routes Limchowfu–Kochow–Shuitung, no. 442 (1914) ; Chinese Map of Kwangtung, 1879.

General direction E. by N. The military road from Limchowfu to Kochow, which has now been constructed as far as mile 19, will follow this route. It is a broad sandy road with a good surface, 20 ft. wide, revetted with gabions where cultivation is crossed, and well supplied with good bridges. The usual route taken by travellers is via Onpo (P.T.), but this entails a water journey of 3 or 4 miles.

The route passes north of the Luichow peninsula, running through the district cities of Shekshing and Fachow. From Fachow the road forms an alternative route to the Fau-shan Ho, which latter route is available from May to October. A few boats navigate this stretch of the river in the winter months, but the journey is long and tedious owing to the many sandbanks in the shallow water.

The country traversed is chiefly dry plain, or downs on which cattle (buffalo and oxen) are grazed, some 50 to 100 ft. above the level of the lower country which is under cultivation. Herds of 30 or 40 buffalo and Indian oxen are frequently met with ; rice is not much in evidence along this route, the chief crops being sugar, tobacco, ground nuts and sweet potatoes. Some ranges of hills about 600 ft. high are crossed, but they are only a slight obstacle with the exception of Pak-t'ang Ling (mile 90·1), where caution would be necessary in the face of a hostile force. Camping-grounds on bivouac scale are frequent, but water is not very plentiful. Timber would generally be available near at hand for repairing bridges.

The telegraph line runs close to the road as far as Paksha W.

(mile 38·9), where it runs south to Onpo ; it rejoins the route at Shekshing and continues close to it until Kochow is reached.

Numerous streams are crossed, the largest being at mile 39·8 a little beyond Paksha W., the Kap-shui River at mile 76·8, and the Fau-shan Ho just beyond Fachow (mile 107·4).

miles	
0	**LIMCHOWFU,** P. T. (see *Gazetteer*). The route leaves the city from the N. side, and starts in a north-easterly direction. The road is level, made of hard clay, and 12 ft. wide with dry cultivation on either side. Telegraph line on r.
1·85	Branch road from NW.
2·1	Width of road 20 ft. Direction E. by N.
3·4	Stone bridge 30 ft. long, 5½ ft. wide, with 2 spans of 15 ft. Depth of water in February, 3 ft. Banks 3 ft. high and steep.
4·9	Brick bridge 270 ft. long, 5 ft. wide, with 18 spans of 15 ft. Depth of water in February, 1 ft. Sandy banks with gentle slope.
5·8	Road ascends for about 200 yds. ; gradient 1/40.
6·4	Branch road to **Lei-hong** on l.
6·6	Another branch road on l.
7·4	Road enters wood 600 yds. wide, with 6 in. timber.
8·0	End of wood.
9·2	Road composed of hard sand, with loose surface. Telegraph line crosses to l.
10·0	**Kêm-li-hü,** market village of 300 houses. Road goes up a hill, gradient 1/20. Branch roads on either side.
10·1	Top of hill. Down gradient 1/20. Nature of country, rolling plain. Fir trees 2 to 6 in. in diameter are obtainable.
11·0	Ford. Width of river 30 ft., depth in February, 1 ft. Military bridge not completed in February 1913.
12·1	Cross roads. Small village.
12·15	Village of 60 houses on l. Some cultivation.

miles	
13·4	Cross roads.
13·5	Road runs through a cutting 5 ft. deep. Width of road 18 ft. Cross roads.
13·7	Village of 50 houses.
14·1	**Pak-shui-t'ong** (30 houses).
14·6	Branch road on r.
15·2	Cross roads. General direction SE.
16·4	Branch road on r. from **Tai-long-hü.**
16·6	Small pond on r. Camping-ground, space for 2 brigades ; firewood obtainable.
16·7	Brick bridge over a dam, 45 ft. long, 3 spans of 15 ft. ; height of dam 15 ft., height of bridge above dam 5 ft. Depth of water on N. side of dam in February, 5 ft. In flood season, when the water rises over 10 ft., it flows over the dam under the bridge.
18·1	Village of 15 houses. Road bends to l. and runs NNE.
18·9	Military road ends. The road now is 2 to 3 ft. wide, and of hard sand. It leads over a small hill, gradient 1/15.
19·0	**Teen-liao,** Hakka village of 60 houses. Stone bridge 30 ft. long, 5 ft. wide, with 2 spans of 15 ft. Depth of water in February, 1 ft. Current l. to r.
21·5	**Chapli,** P. (or **Chap-hau**), market town of 200 houses on a river which flows S. into *Ying-lo Bay*, $2\frac{1}{2}$ miles distant.
22·1	E. of the town is a bridge with 7 stone spans of 15 ft., 6 ft. wide, total length 105 ft. Depth of river in dry season, 2 ft. Right bank a cliff 15 ft. high, l. bank 6 ft. high. Junks come up to this point at certain periods of the year.
	From Chapli the road is 3 ft. wide with sand surface. Hills 100 ft. high on l., cultivated plain 2 to 3 miles broad on r.
23·1	**Lung-ngan** (20 houses).

miles

23·7 Village of 20 houses, a few hundred yards from an inlet of the sea.

25·0 **Leem-ü-t'ong** (20 houses) at head of inlet. Hill of 400 ft. ½ mile to l., and ½ mile further back a hill of 1,000 ft.

25·9 **Pou-lo,** market village (180 houses). Direction NE.

26·8 Stone bridge 30 ft. long, 5 ft. wide, with 3 spans of 10 ft. Depth of water in dry season, 2 to 3 ft. Banks 5 ft. high and steep; current l. to r. 3-ft. dam just above bridge.

Tai-lou-shün (40 houses). Just beyond the village, telegraph line crosses route and runs due E. to Sam-miu-ch'ung (mile 34·5).

Dry cultivation in this vicinity; no rice. Low wooded hills on l.; timber up to 6 in. available. General direction NNE.

29·1 Route turns E.

Ch'en-ngit and **Leung-ngit,** villages of about 70 houses each, ¼ mile to l. Hills recede, forming a valley.

31·2 Bridge 35 ft. long, 5 ft. wide, with 3 spans of 10 ft. Bed of stream dry in dry season. Current l. to r.; banks steep. Camping-ground for 1 brigade on l.

31·9 **T'it-shan** (20 houses) at the foot of a low hill. Wooded hill on r. Route crosses a river flowing down from another valley on l., and turns S. Bridge 100 ft. long, 5 ft. wide, with 6 spans of 15 ft. 2 ft. of water in dry season.

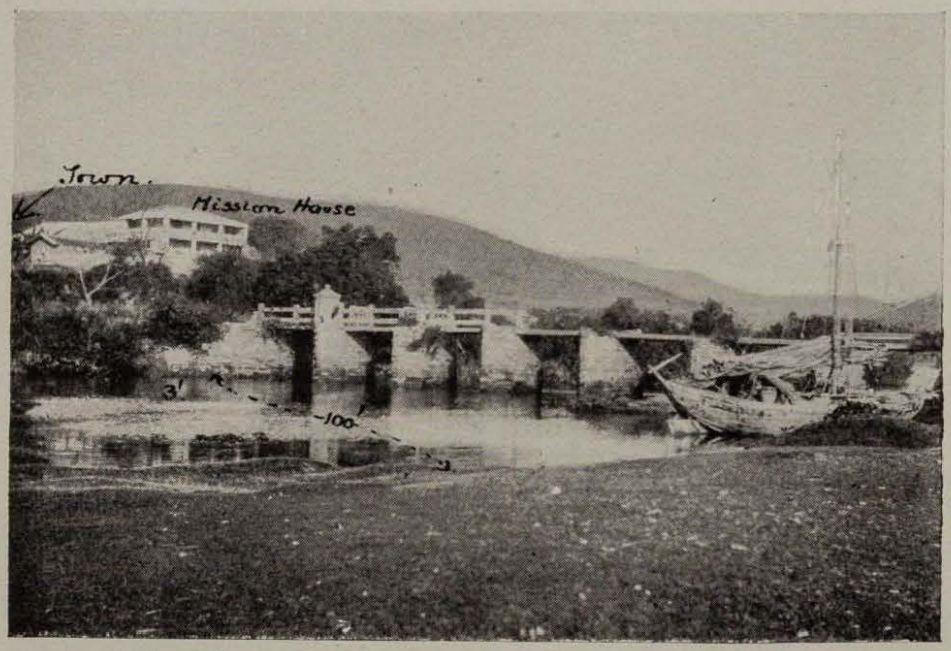
33·1 Camping-ground for 1 brigade; water supply good. From here to mile 34·5 road passes through growths of fir trees up to 4 in. in diameter.

34·5 Bridge over another stream; length 85 ft., width 5 ft.; 5 stone spans of 15 ft. Depth of water in dry season 2 ft.

Sam-miu-ch'ung, village. Telegraph line coming



ICHANG BRIDGE



CHAP-HAU BRIDGE

miles	
	from Tai-lou-shün (mile 26·8) crosses to l. of route. Direction SE.
35·7	Road passes through sparsely inhabited country consisting of rolling 50-ft. hills, interspersed with dry cultivation. Direction S.
38·9	**Paksha W.,** P. T., a large walled market with town of 200 houses adjoining. Telegraph line crosses route and goes off to **Onpo** (P.T.) on r. Road still 3 ft. wide with hard sand surface.
39·8	Ford in dry season across a river 500 ft. wide. Maximum depth in low water season, 1½ ft. Probable rise, 5 to 6 ft. Banks slope gently, current l. to r., 2 knots at low water. The crossing would be difficult in summer. No boats visible. Camping-ground on l.
41·4	Village of 20 houses.
41·7	Branch road on l. Route turns E.
42·1	Stone bridge 20 ft. long, with 2 spans of 10 ft. Depth of stream at low water, 1 ft. Banks steep, 4 ft. high.
42·4	Short rise, gradient 1/15. Hill 150 ft. high on l.
43·0	Short descent, gradient 1/20. Road bends SSE.
43·7	Branch road on r.
44·2	*Ham-shui-k'iu,* stone bridge over stream flowing SW. into Ying-lo Bay. Length 40 ft., width 5 ft.; 3 spans of 10 ft.; extra stout stone piers. 2 ft. of water in dry season. Banks steep, 8 ft. high.
44·4	From here on is a broad plain with dry cultivation. General direction ESE. Branch road on r. to **Shanhow,** P., some 4 miles distant.
45·2	Branch road on r.
46·3	Small village of 15 houses. Cross roads.
46·7	Village of 20 houses. Country sparsely wooded and undulating.
47·6	Village of 20 houses.
48·4	Small stream. Camping-ground for 2 battalions on r.

miles	
49·1	Village of 20 houses. Descent of 1/50 to mile 49·5.
49·5	**K'ou-ling,** village.
50·0	Branch road to r.
50·6	Village of 20 houses.
50·8	Wooden bridge 100 ft. long, 1½ ft. wide, with 7 spans of 12 ft. Depth of water in dry season, 1 ft. Banks slope gently and are liable to flood. Probable rise of river in rains, 4 ft. General direction now NE.
51·4	Rise of 1/40 for 1,000 yds.
52·0	Fall of 1/40. Cross roads. Hilly country on r.
53·0	Branch road joins from l. rear.
53·3	**Ts'ang-kwai** (20 houses).
53·4	**Yeung-muk,** another small village. General direction now E.
53·7	Branch road on l. Down grade of 1/50.
54·0	Ford. Width of river 150 ft. Current l. to r. Depth in dry season 6 in., but liable to 3 ft. rise. Bridge desirable for 20 ft. from r. bank if water is over 3 ft. deep. Camping-ground for 2 brigades on l. Hills rising to 800 ft. about 3½ miles distant on l.
54·6	Branch road on l.
55·0	Cart track joins from r.
55·4	Village of 10 houses.
55·6	Road from here to Chingping Tung (mile 58) and for most of the way on to Shek-ling (mile 71·8) is a 5 to 6 ft. cart road, gravel and sand surface. Country undulating, with 50 ft. rises, covered with plantations of fir trees 3 in. in diameter. Branch cart track to l.
57·0	Branch cart track to r.
58·0	**Chingping Tung,** P., market village of 100 houses. From here to Shek-ling the country is dry plain. Water is generally obtained from wells. Dry cultivation.
58·5	Branch track to r.
58·8	Branch path to r. Road bends to l.
59·5	Branch track to l.

miles	
59·9	**Heung-shui** (or **Liung-shui**), village of 20 houses. Direction E.
60·1	Small camping-ground for 1 battalion on l.
60·3	Branch road to l.
60·9	Village of 30 houses ¼ mile to r.
61·5	Village of 30 houses ¼ mile to l. General direction ESE.
62·4	Ford. Breadth of river 150 ft.; deepest part 3 ft. in summer. There is little water in winter. Current l. to r. Right bank slopes gently, l. bank is 15 ft. high and steep, but negotiable by path.
	Wong-chuk-kong and **U-tei-kok,** villages with about 40 houses on r. The cart track stops at the village and recommences further on.
62·7	Road to l.
63·4	Road to r.
63·6	Village of 20 houses.
63·8	**Sha-ts'ün,** village of 40 houses.
64·4	Wooden trestle bridge 180 ft. long, 1 ft. wide, with 18 spans of 10 ft. Total width of river 260 yds. Depth of water in dry season 3 in. Current l. to r. Banks slope gently. A long stretch of loose sand on either side of channel. Probable rise in rains, 2 ft. The river might be forded at any season. Route turns l. General direction ENE.
	From mile 64 to 65 the country is more enclosed. Bamboo and fir up to 4 in. are plentiful.
65·2	**Ngêt-tsai-t'ong** (30 houses) ¼ mile to l. For the next mile the road is up and down hill. Gradients generally about 1/30 for short distances.
66·9	Temple and branch track to r.
67·7	Branch road to l.
67·9	Road narrows to 3 ft.
68·5	**Tên-fu** (50 houses).
68·6	**T'oi-ts'un,** strongly walled market village of 200 houses on l.

miles

69·0 Wooden bridge 60 ft. long, 2 ft. wide, with 5 spans of 10 ft. Depth of stream in dry season, 1 ft. Current l. to r. Banks steep. Camping-ground for 2 brigades on l. Road bends NW.

70·2 Two roads join from l. rear.

71·0 **Pak-shui-t'ong** (30 houses) on l.

71·8 **Shek-ling,** market town of 200 houses. Road turns E. From here for ½ mile the cart tracks disappear. Road is of gravel, 3 ft. wide. Water in the vicinity is from wells. Hills 300 to 500 ft. high about a mile distant on l.

72·2 Cart tracks appear again.

73·6 Branch road to l. Downs on r.

74·3 Camping-ground for 2 brigades on l. Water from a stream and also wood available.

76·8 **Om-p'ou,** village.[1] Here the *Kap-shui River* (also known as the *Ho Kong* or the Shekkok River, and marked Chouei-Tou Kiang on the French Map) is met, and crossed in winter by bridge and ferry. The total width of the river is 275 yds. At low water 90 yds. of sand are crossed, then a wooden trestle bridge 2 ft. wide, with 12 spans of 6 ft., over a channel with 1 ft. depth of water; then 120 yds. of sand; and finally a channel 40 yds. wide and 2 ft. deep is crossed by ferry. There are at the ferry 7 boats, each capable of containing 12 men. The Kap-shui River is navigable all the year round by boats 40 ft. long, drawing 1½ ft., and in summer by larger boats drawing 3 ft. These boats have a capacity of from 5 to 8 tons, and would accommodate 20 men for a journey of over 24 hrs. The river is navigable by them for 50 miles above Om-p'ou.

Hill 1,200 ft. high about 5 miles distant on l.

77·5 Road narrows to 2 ft. Dry cultivation.

[1] Not to be confused with the port of Onpo, P. T., some 20 miles to the SW. (see *Gazetteer*).





PANORAMA : (1) SHEKLING (2) PAK-SHA TO YEUNG-MUK

miles	
78·4	Branch road to l.
78·8	Branch road to r. Cart track recommences.
80·4	**P'o-tsai** (10 houses).
81·5	**Ho-ts'ün** (20 houses).
82·4	**SHEKSHING,** P. T., district city (see *Gazetteer*). Roads from here go N. to **Watlam** in Kwangsi (see Routes 81 and 82), and S. to **Suikai** (see Routes 76–78). Telegraph line comes in from **Onpo** on the SW. and follows the remainder of the route to Kochow.
	Hill of 400 ft. about 1½ mile distant on l. General direction to Fachow, E. by N.
82·8	End of suburb. Telegraph line crosses to r. and runs close to the route. The road through the suburb is available for carts. Road outside the suburb is of gravel and 8 ft. wide. Branch road to r. Route crosses a plain of dry cultivation and paddy. Low hills of 50 ft. and under on l. Pagoda 1½ mile distant on r.
83·9	Single-arch bridge, 25 ft. long, 7 ft. wide, over a stream flowing l. to r. with 6 in. of water in dry season.
84·7	**Leen-t'ong** (30 houses). Branch road to l.
85·2	Road narrows to 5 ft.
85·8	Branch road to r.
86·8	Branch road to l.
87·0	Road crosses a small saddle at an easy gradient and winds about among low 50-ft. hills. Gradients 1/30. The country is well wooded, with trees up to 4 in. diameter. Cart tracks disappear and wheelbarrow tracks replace them. Road 3 to 4 ft. wide, of gravel.
89·1	Branch road to l.
89·2	Village of 20 houses 200 yds. to l.
90·1	**Pak-t'ang-ling,** village. Up grade 1/30.
90·3	Down grade 1/15.

miles	
90·9	Small stream and camping-ground for 1 battalion 200 yds. SE. of road.
91·6	**Ho-muk-ch'ung** (20 houses).
91·7	Road leaves the hill country and emerges on to grass downs. It widens to 7 ft., and cart tracks are again seen. Branch road to l.
92·5	Road narrows to 3 ft. Road from **Kun-k'iu-t'ong** joins on r. rear. Country consists of low rolling grass hills.
92·8	**Sunon,** P., straggling market town of 300 houses. Water from wells.
93·3	Cart track which skirted Sunon is again met. Surface of gravel.
93·5	Branch road to l.
94·5	Branch road joins from l. rear.
94·6	Pass. Gradient of 1/20 up and down over a range of low hills.
95·3	Short up and down gradient of 1/10. Branch road to r. Undulating country with patches of fir trees 3 to 4 in. in diameter.
	Fu-kwai-t'ong (40 houses).
95·9	Branch road to l. For the next 3 miles there are short gradients of 1/20, and road narrows to 3 ft. Hill of 800 ft. about $1\frac{1}{4}$ mile to l.
99·1	Camping-ground for 1 battalion on l.
99·9	Cart tracks join the route again. Short rise and descent of 1/15 over a low range of hills.
	Heung-shui (20 houses) $\frac{1}{2}$ mile distant on l.
102·0	**T'ong-yêm-ngêm** (40 houses) on r.
102·3	Causeway 520 yds. long, 5 ft. wide and 8 ft. high, leading to bridge which has collapsed.
102·6	Bridge 80 ft. long, with broken spans of 15 ft. Current l. to r. In dry season a short détour allows of crossing the river 100 yds. upstream, where it is practically dry. Banks 7 ft. high. Probable rise, 5 ft.

miles

103·1 Wood of fir trees, 100 yds. square ; 3 in. timber.

104·3 Another wood of fir trees, 200 yds. square ; 3 to 4 in. timber. Short up grade of 1/15.

104·4 Down grade of 1/15.

Sha-wok (20 houses).

105·1 Branch road to village of 20 houses on r.

105·3 Branch road on r. to **Shek-kao-ts'ün.** Route runs along a valley among 50 ft. hills, with rice cultivation.

105·7 **Sam-lei-t'ong** (15 houses) on l. ; **Wo-lei-t'ong** (20 houses) on r.

106·3 Road passes through a cutting 20 ft. deep, 100 yds. long, and 6 ft. wide.

107·1 **FACHOW,** P. T., departmental city (see *Gazetteer*), situated at the junction of the *Fau-shan Shui* and a large tributary (called *Ho Kong* on the Chinese Map) flowing from the NW. The city lies on the r. bank of the former, and S. of the latter.

Leaving Fachow by the east gate, the route crosses the Fau-shan Shui just below the junction of the two branches. This river is navigable for boats 45 ft. long, 9 ft. beam, and drawing $1\frac{1}{2}$ ft., during the whole year unless the winter season happens to be exceptionally dry. The journey between Fachow and Kochow takes 3 days upstream and 1 day downstream. There is a regular ferry across the river, which is 300 yds. wide, with a depth of from 1 to $2\frac{1}{2}$ ft. in the dry season. The ferry service proper would take 50 men at one time, but boats could be obtained to transport some 500 men at a time. Current in low water season, 2 knots. The banks slope gently. The tributary, which comes from the Kwangsi border and joins the main river just N. of the city, is 250 yds. wide, but not navigable.

From here the road is 2 ft. wide, with gravel surface, and runs through vegetable cultivation. General direction N. by E. Telegraph line on l.,

miles	
	between the road and the river. Camping-ground $\frac{1}{4}$ mile to r.
108·9	Road broadens to 5 ft., but is not used by carts.
109·4	Branch road to r. Road approaches river on l. Telegraph line crosses route twice, and continues on l.
110·3	Branch road on l. Road which is here 3 ft. wide, turns ENE., away from river.
111·1	Road broadens to 6 ft. Country consists of flat plain with dry cultivation.
112·6	Branch road to l.
116·3	**Namshing,** P., large market town of 800 houses.
116·8	Paved road 5 to 6 ft. wide. Carts with $2\frac{3}{4}$ ft. track are used here. General direction NE.
117·1	Village of 20 houses on l. Road 6 ft. wide, and of gravel.
118·3	Road narrows to 3 ft. Small wood of 3 in. fir trees.
120·6	Route approaches a sharp bend in the river, which is here 250 yds. wide. Village of 30 houses on bank.
121·3	Village of 20 houses. Road narrows to 3 ft.
121·6	Branch road to r.
122·1	Branch road joins from r. rear.
122·4	Branch road to l.
122·6	Brick bridge, 8 ft. wide, with three 18-ft. arches, over small affluent of the Fau-shan Shui. Current r. to l. Bed dry in low water season, when it is hard to see the course of the stream.
123·0	Road 4 ft. wide and paved.
123·2	**Shekku,** P., market town of 300 houses. Telegraph line crosses to r. General direction NNE.
123·4	Camping-ground 600 by 400 yds. Water from pond.
123·7	Road 7 ft. wide and of hard sand.
124·7	Village of 20 houses.
126·1	Road narrows to 4 ft. Village of 30 houses.
129·2	*Ts'ing-p'ing-kuk,* large barracks on l., surrounded by a wall, with accommodation for 1 Chinese brigade.

miles	
129·9	**Kwai-p'ang,** small village of 10 houses.
130·6	Stone bridge 30 ft. long, 12 ft. wide, with 3 spans of 8, 12, and 8 ft. respectively, over small tributary flowing r. to l. Depth of water in dry season, 1 ft. Banks low and muddy.
131·2	Village of 60 houses. Low hills on r.
131·5	Road again meets river and follows its l. bank.
132·0	7-storeyed pagoda on opposite bank.
132·7	Bridge 12 ft. wide, with 3 spans of 15 ft., over tributary with 1 ft. of water in dry season. Height of bridge above river bed, 12 ft. Banks steep and rocky.
133·0	**KOCHOW,** P. T., south gate (see *Gazetteer*).

NOTES ON THE LUICHOW PENINSULA

The Luichow peninsula, which lies approximately between latitudes 21° 25′ and 20° 13′ N. and longitudes 109° 35′ and 110° 33′ E., projects southward from the southern coast of Kwangtung towards the island of Hainan, to which it was at one time joined. It is one of the least known parts of Kwangtung, few Europeans having visited its interior, and large portions of its coast line, particularly on the west side, being unsurveyed. Its soil is for the most part a gravelly clay of reddish colour, and its surface is undulating, with numerous depressions which in the past have been overrun by the sea. Of these, the best example is the plain of Luichow, which extends some 18 miles from north to south, forming the most fertile, populous and healthy portion of the peninsula. Here the water supply is good and the land suitable for rice cultivation. Around this plain stretches the plateau region with heights rising to 600 and 900 ft., a thinly peopled, uncultivated district said to be unhealthy and to suffer from bad water supply. Along the coast are barren sand dunes with a few scattered fishing hamlets.

The native population is a mixture of many elements—remnants of Chinese troops, aborigines, pirates, merchants, and immigrants from many places, including a sprinkling of Cantonese and Hakkas. Two principal dialects are spoken, a debased form of Cantonese, and Hoklo.

The country, with its products, is on the whole very similar to the northern part of Hainan. It is under the same administration as that island, its three departments—Suikai, Luichow and Süwenyun—being under the prefecture of Kiungchow.

The main authority is C. Madrolle, 'Le Péninsule de Loui-tcheou,' *Annales de Géographie*, vol. vii, Paris, 1898.

ROUTE 76

PAK-CHONG TO SUIKAI

Land Route (86 miles)

Authorities: French 1 : 1,000,000 Map (Hanoï section : 1900) ; *Baie de Quan-cheou-wan* : *Carte provisoire, &c.*, 1899 ; Carte Chinoise : Côte du Quang-tong, sheet no. 2 (Lei Tcheou) ; Chinese Map of Kwangtung, 1879.

General direction N. This route follows the line of the telegraph. No details are available, and the distances, measured on the map, are only approximate.

miles	
0	**Pak-chong,** fishing village and fort on the W. side of Hoingan Bay, on the S. shore of the Luichow peninsula. Route follows the shore of the bay and then the r. bank of the *Sheung-po-tong K'ai* in a north-easterly direction.
4	**Hoingan,** P., junk port and large village. The road now turns NW. and runs parallel to the river, which is about 2 miles distant on r., with a few hills intervening.
	Süwenyun Pagoda, a conspicuous landmark, is

miles

passed on l.; and near it is a wireless station, now abandoned.

8½ **SÜWENYUN,** P. T., district city (see *Gazetteer*). Route turns N.

12 **Ha-tsing,** village.

15 Route crosses the *Ko-shan-ling*, a range of hills running NE.–SW.

20 Bridge over the *Tun-t'au Shui*, a river flowing W. into the gulf of Tonkin. **Na-kong,** village on r. bank. Road turns NE. up the river valley.

23½ **Shekpan,** P., market village near the source of the river. Route turns N.

26 Route crosses the *Fat-t'o-ling*, a small range of hills.

27 Headwaters of the *Yü-yin Shui*, which flows W.

29 **Kuncheong,** P., market village. Route now traverses hilly country.

38 **Luiko,** P., market village on the r. bank of the *King-lui Shui*, a small river flowing NE. into Mandarin Bay. The road runs NNW. over low rolling country.

47 Route crosses the *Nam-to Shui*, a fairly large river flowing E. into Mandarin Bay, just above the waterway connecting it with the *Nam-t'ing Shui*, and turns NNE.

50 The Nam-t'ing River is crossed, which flows in a semicircle round Luichow.

50½ **LUICHOW,** P. T. (see *Gazetteer*). The road continues N. parallel with the l. bank of the Nam-t'ing Shui, here known as the *Tai-t'o Shui*.

52 **U-long-ts'ün,** village on river bank.

53 **Mo-lai-ts'ün,** village.

54½ **Ko-shan-ts'ün,** near the junction of a small affluent. Route goes up the r. bank of the affluent.

56½ *Pak-chong-k'iu*, a long bridge over the western corner of the *Tak-yi Lake*, which extends about 2 miles E. and W. Route goes NNE. through a plain dotted with numerous villages.

miles	
60	**Ko-voui,** village on the r. bank of the *K'in-leng Shui*, and about 5 miles from its mouth in Mandarin Bay. Route crosses river, and continues NNE. over rolling country.
66	**Tau-mun,** village. Route crosses the *Mo-lok Shui*, and goes up the l. bank of a small tributary flowing from the N.
72	**Mai-sz-ts'ün,** village amidst low hills.
83	**Kam-tchin,** village. Here the alternative route from Ko-voui joins on r. (see Route 77). An affluent of the Ma-ts'e River is crossed, flowing l. to r. Direction N.
83½	**Sa-po,** small village and ruins, beyond which is a cultivated plain.
84¼	Bridge over stream ; current r. to l.
85½	Road passes a number of groves on l., then a tower and a pawnshop.
86	**SUIKAI,** P. T., district city (see *Gazetteer*).

ROUTE 77

LUICHOW TO SUIKAI

Land Route (37 miles)

Authorities : *Baie de Quan-cheou-wan* : *Carte provisoire, &c.*, 1899 ; Carte chinoise : Côte du Quang-tong, sheet no. 2 (Lei Tcheou) ; French 1 : 1,000,000 Map (Hanoï section : 1900) ; Chinese Map of Kwangtung, 1879.

General direction N. by E. This is an alternative to Route 76 for the section from Ko-voui (mile 9½) to Kam-tchin (mile 34). From the K'in-leng Shui to Ts'e-mun (mile 25½) it follows the boundary of the French leased territory of Kwangchowwan. The road is described as a 'Mandarin road' ; it passes through low undulating country, becoming rather more hilly N. of Shek-mun, and flatter again as Suikai

is approached. Distances have been measured from the French map of Kwangchowwan, and the French spelling of place-names has been adopted where the characters are not known.

miles	
0	**LUICHOW,** P. T. (see *Gazetteer*). For details as far as Ko-voui, see Route 76, mile 50½ to 60.
9½	**Ko-voui,** village on the r. bank of the *K'in-leng Shui.* Route starts ESE., and crosses the river at the boundary of the French leased territory, about a mile below the village. The road now leads N. through undulating country.
11¾	**San-me,** village on a low hill on l. A track goes off on r. to **T'ung-ming-sun** (Téoman on the French Map) at the mouth of the river, about 4 miles distant to the SE. General direction now NE.
12¾	Ruins passed on r. Road crosses a depression.
13½	**Tang-kwai,** village on a low hill 300 yds. to r.
14¼	Path to **Shingping,** P., 300 yds. distant on r. Another village on l.
14¾	Paths to **Pa-tsang** and **Mok-tong** on l., and to **Lak-keo** on r.
15	Ruins on l. A flat stretch of clay is now crossed.
15½	Brick-kiln on l. Low hill on r. **Ten-hoi,** village on l.
16	**Tin-tan,** village on l.
17	**Shan-hau-ts'ün,** village on l. Road now descends to river.
17¾	Ferry over *Mo-lok Shui* (see Route 76, mile 66), here about ¼ mile wide.
18	**Mao-tong,** village ¼ mile distant on l.
19	**Sunhü,** P., market village. A road branches off on r., leading via **P'o-tsai-hü** to **Hoi-t'au,** some 14 miles distant near the mouth of the Ma-ts'e River. Route continues NNE. over flat country.
19¾	Village on l.
20½	**Nao-leou,** village.

miles	
21½	**Tong-gia,** village on r. in a valley. The road passes over a hill.
23	**Tchin-loun,** village on l. ; **San-diou,** a rather larger village on r.
24½	**Tam-kau-tchin,** market village. From here tracks go off SE. through hilly country to P'o-tsai-hü, and E. through a plain to Hoi-t'au. Route goes N. over undulating ground.
25½	**Ts'e-mun,** small market town and military post. There is a pagoda at the S. end.
26	Oil factory and pawnshop just outside the town. Here the route leaves the boundary of the leased territory.
26¾	**Ha-ho-tchin,** a large village on r. of the road, which here crosses two hills, and then a valley.
27¾	Bridge over a stream.
28	Gentle up gradient.
29	**Sui-kao-tchin,** village. Route runs along a valley between low hills.
30	**Tang-pa-po,** hamlet on l.
30¼	Ruins on r. Route skirts the base of *Pat-ka Shan* (Pic Zimmerman) a high hill on l. Isolated low hills on r. Direction NNW.
31½	**Fou-tchap-tchin,** village on r.
32¼	**Pa-kau-tchin,** village on r. The road crosses a low hill and passes through bush, beyond which is a stretch of level pasture land. Direction N.
33¼	Village on r.
33½	**Io-ka-tchin,** village, and a short stretch of barren rocky ground.
34	**Kam-tchin,** village. For details from here to Suikai, see Route 76, mile 83.
37	**SUIKAI,** P. T. (see *Gazetteer*).

ROUTE 78

SUIKAI TO FACHOW

Land Route (31 miles)

Authorities: French 1 : 1,000,000 Map (Hanoï and Canton sections : 1900); Carte chinoise : Côte du Quang-tong, sheet no. 2 (Lei Tcheou); Chinese Map of Kwangtung, 1879.

General direction NE. The route follows the l. bank of the Suikai River nearly up to its junction with the Ma-ts'e River, then turning north, crosses the latter near Leungkatan, and continues in a north-easterly direction through flat or undulating country, studded with villages, to Fachow. No detailed information is available about this route, which follows the line of the telegraph. Distances have been measured from the maps, and are only approximate.

miles	
0	**SUIKAI,** P. T. The route starts E., crossing a small stream, the *Tung-k'ai Shui,* just outside the city.
1	**Tung-mun-p'o,** village. Route turns NE. and runs parallel to the course of the *Suikai River* on r. Low hills on l.
8	**Lam-tung,** market village on the l. bank of the Suikai River, about a mile above its junction with the *Tung-k'iu Shui* (the upper course of the Ma-ts'e River), which flows in from the N. Route turns N. and crosses some low hills.
13	**Leungkatan,** P., market village. Route turns E. and crosses the Tung-k'iu Shui.
16	*Wing-on Fort* on r. General direction now NE. Surrounding country flat or undulating.
19	**Yeungmui W.,** P. Country becomes more hilly.
24	**Kam-ts'ün,** village.
28	**Leungkwong,** P., market village. Country more thickly populated.

miles	
29½	**Tsatpak,** P., market village among low hills.
31	**FACHOW,** P. T. (see *Gazetteer*, and Route 75, mile 107·1).

ROUTE 79

HOI-T'AU TO SUIKAI

Land Route (17¾ miles)

Authorities: *Baie de Quan-cheou-wan*: *Carte provisoire, &c.*, 1899; Carte chinoise: Côte du Quang-tong, sheet no. 2 (Lei Tcheou).

General direction NW. This route runs from Hoi-t'au near the mouth of the Ma-ts'e River in the French leased territory of Kwangchowwan, entering Chinese territory just beyond the port of Tse-kam (mile 5¼). The road up to this point is described as good. From Tse-kam the route follows a 'Mandarin road' of the usual type which passes a few hundred yards from the NW. corner of the town. The surrounding country is for the most part flat, with numerous villages. The French spelling of place-names has been retained in several cases.

miles	
0	**Hoi-t'au,** large village and French post about a mile W. of Fort Bayard at the mouth of the Ma-ts'e River. Route starts from the W. side of the village and runs NNW. past the foot of a hill on l. Small stream a few hundred yards to r. and low hills beyond.
1¾	**Phan-né,** village on l. at the foot of a small hill.
2¼	**Oc-sam,** village on l. Just before the village, a path goes off on r., passing a pagoda on the other side of the stream, and leading to **Pen-loc,** a village on the Ma-ts'e River.
3¼	**Van-po,** large village on r.
4¾	**Pe-se,** village on r.

miles	
5	Ford across a small stream. There is a bridge about ¼ mile further up on l.
5¼	**Tse-kam** (Ch'ik-hom), walled town and junk port on the Ma-ts'e River (see chapter on Kwangchowwan, pp. 125–9). Route continues NW. by a Mandarin road which passes close to the town.
6½	Boundary of leased territory. Village on l. Road crosses a small stream.
7½	**Kou-sou,** village on r. There are two large villages and several smaller ones between this and the river, which is here about 1¾ miles distant.
9½	**Wong-leuk,** large village on r.
10	**Voui-liok,** large village on l. Route turns l. and then r.
12	**Vong-kia,** village on l., and another village on r.
12¾	**Kou-ti-tchin,** village on l.
13¼	**Nam-tchin,** village on r. Direction now WNW.
13½	Large village ¼ mile to r. Short down gradient.
14	Villages on r. and l. Short up gradient.
14½	Large village of **Va-tchang-ha** about ¾ mile distant on l.
15	Ruins on r.
15¾	**Sien-tcheou-peou,** village. Route descends into a valley.
16¼	Bridge over *Suikai River*.
16½	Slight rise, with village at the top.
17	Village.
17¾	**SUIKAI,** P. T. (see *Gazetteer*).

ROUTE 80

SZ-KUN-PO TO LIMCHOWFU

Land and Water Route (180 miles)

Authorities: Capt. G. T. Brierley and Mr. G. W. Pearson, August 1908; French 1 : 1,000,000 Map (Hanoï Section, 1900); War Office Postal Map of the district north of Pakhoi, no. 446; Chinese Map of Kwangtung, 1879.

General direction S. by W. This route from Sz-kun-po on the Yu Kong, 23 miles below Hengchow, crosses the dividing range between the Yu Kong and the Limchow River. It goes overland as far as Pokpak (mile 60½) on the latter river, the road being very rough and only fit for coolie traffic. The country is exceedingly fertile in the valleys, and there are numerous villages; but the mountains are bare and are said to be infested by brigands.

From Pokpak to Limchowfu the journey was made by cargo boat. The boat was about 75 ft. long, with 8 ft. beam and long ledges running along the gunwales for the crew to use while poling. It was provided with one large sail, a rudder in the stern, and a long heavy oar at the bow worked by two men for steering through rapids. As a rule one cargo boat leaves Pokpak daily for Limchowfu, the trade being chiefly in indigo and salt.

Between Pokpak and Shekkong (mile 162) the scenery is very beautiful. The river is about 200 yds. wide, and there are many rapids; but as the water is high in August, these were easily passed. Below Shekkong the country becomes flat. The Kwangsi–Kwangtung boundary is crossed just beyond Ma-hau (mile 105).

The land route from Pokpak to Limchowfu is about 92 miles long, as compared with 120 by water.

miles	
0	**Sz-kun-po,** a village on the r. bank of the *Yu Kong* (see Route 51, mile 224). General direction SE.

miles	
4	**Pakhop,** P., market town of 1,000 inhabitants, with a large number of shops.
21½	**Chaa-hoe,** village. The route now passes through mountainous country infested with brigands. Most of the trade to Pokpak follows a road leading round the mountains to the E., as this is considered less dangerous.
46	**Sheungfung,** P., market town. The principal street of the town is almost entirely roofed over, making it very dark. After leaving Sheungfung, the country is very desolate and so hilly that there is little room for cultivation, though all possible level ground is converted into paddy fields and lotus or indigo beds. Lotus beds are frequently met with in this district, the roots of the lotus being used for food ; in some places they extend for several acres.
60½	**Pokpak,** P., a walled district city about 400 yds. square, very picturesque and seemingly prosperous, on the l. bank of the Limchow River, which at this point is sometimes known as the *Nam-lau Kong.* The streets and city walls are cement-paved, and there are also cemented paths in the suburbs, which gives the place an unusually clean appearance. The town is in the centre of a well-cultivated valley, the main crops being rice, sugar, and indigo.
	From here to Limchowfu the journey was made by boat. General direction SW.
67	Affluent on l., flowing from a range of hills on the S.
90	**Shahochai,** P., large village on r.
105	**Ma-hau,** village on l. Route crosses the Kwang-tung boundary.
119	**Lau-hü,** village at the mouth of a tributary on r. General direction W.
122	**Shekchung,** P., market village on r.
136	**Kin-chau,** village on r. Route turns NW.
141	Affluent on r. Route turns SW

miles	
148	**Shonglok,** P., market village a little distance from bank on l. This section of the river is called *Lo-shing Kong.*
157	**Dochiu,** P., market village of 70 houses on r.
159	*Moli River*, a large tributary, comes in on r. Route turns l. and goes S.
162	**Shekkong,** P., small market town of 200 houses on l. (see Route 83, mile 27¼). The country now becomes flat. River makes a curve to r. and flows NW.
165	Pagoda on l. River bends SW.
167	Small affluent on l. River now flows through an open cultivated plain.
177½	**Tsung-kong-hau,** port at the junction of several branches on r. where cargo boats from upstream transfer their cargo to junks. From here the road is taken to Limchowfu. Direction ESE.
180	**LIMCHOWFU,** P. T. (see *Gazetteer*).

ROUTE 81

POKPAK TO WATLAM

Water and Land Route (19 miles)

Authorities : French 1 : 1,000,000 Map (Hanoï Section, 1900) ; Maritime Customs Decennial Reports, 1892–1901 ; Chinese Map of Kwangsi.

General direction N. by E. This route is a continuation of the river journey from Limchowfu to Pokpak given in Route 80 (reversed). Sea-going junks convey goods from Pakhoi to Limchowfu, where they are transhipped into light-draught boats for the journey up the Limchow River to Shuenfow, the head of navigation. From here they are carried by land to Watlam. A road follows the left bank of the river from Limchowfu to Watlam.

The route has not been traversed in detail, and distances are approximate only.

miles	
0	**POKPAK,** P. (see Route 80, mile 60½).
4	Affluent on l. *Fuk-ngau-ling*, range of hills on r.
8	**Siu-t'in-hü,** market village on r.
10	**Shuenfow,** P., head of navigation, opposite the mouth of a tributary which flows in from **Hingyeh** on the NW. (see Route 82 B, mile 17). This appears to be the same locality as **Sun-k'iu-hü** and Sing-kiao-hsu on the Chinese and French maps, respectively. Goods are here transferred to coolies and carried by land to Watlam.
12	Road crosses a tributary flowing from the E., and continues close to the river bank on l.
15	**Pak-shek-p'o** (French map: Pe-che-tang), village on river bank.
18	Route crosses river at the junction of two branches which flow on either side of the city of Watlam.
19	**WATLAM,** P. T., an important departmental city and a busy centre of trade, situated in one of the richest parts of the province of Kwangsi. For its communications with the West River, see Routes 82 (A), (B) and (C).

ROUTES 82 (A) (B) and (C)

WATLAM TO THE WEST RIVER

Authorities: French 1 : 1,000,000 Map (Hanoï and Canton sections, 1900); War Office Postal Map of the district north of Pakhoi, no. 446; Chinese Map of Kwangsi; Maritime Customs Reports.

These routes all lie within the province of Kwangsi, but serve as connecting links between the coast of West Kwang-tung and the West River. Distances have been measured from the maps, and are only approximate.

ROUTE 82 (A)

WATLAM TO TENGYÜN

Land and Water Route (102 miles)

General direction NE. This is an old-established trade route which connects the West River near Wuchow with Watlam and so with Pakhoi. The first stage of the route, about 17 miles, is by road to Paklow on the Junghsien River or Wong-fa Kong. This river is free from rapids, but is only navigable by small craft. Paklow is the head of navigation for the greater part of the year; but in very dry weather land transport must be used as far as Junghsien Si.

miles	
0	**WATLAM,** P. T. Route starts NE. through undulating country.
3	Eastern branch of Watlam River is crossed; current l. to r.
9	Route goes down a valley. Range of hills on l. forming watershed of West River basin.
16	Route crosses a small affluent of the *Wong-fa Kong*; current l. to r
17	**Paklow,** P., on the r. bank of another small branch of the same river. A road goes off on r. to **Luchwan,** some 30 miles to the S.
	From here, the route continues by boat to the West River. There is also a road following the river to Junghsien Si. Direction at first SE.
20	The main stream is entered, and route turns NNE.
25	Affluent on l., coming down from high hills.
31	**Wai-lung-kong-hau,** village at the mouth of an affluent on l. General direction NE.
40	Affluent on r.
42	**Junghsien Si,** P., district city of some importance on l., at the mouth of a small affluent. A road follows the l. bank of the river to Tengyün.

miles	
47	**Shekchaihü,** P., market village on r.
54	Tributary on r., coming from the Kwangtung border, some 40 miles distant on the SE.
59	**Yünti,** P., village on l. Hills approach river on l.
69	**Tzeliang,** P., large village on l. opposite the mouth of the *Lung-ti Kong*; this tributary comes from **Shumkai,** a market centre about 20 miles distant to the E.
73	**Po-lo-sz,** village on r.
80	**Tu-tsai-kia,** village on l. Country less hilly.
83	Tributary on r., and **Pao-kia-sz,** village just beyond. The river hereabouts is sometimes known as the *Kim Kong.*
88	Tributary on l. flowing down from the N. side of the dividing range of hills mentioned at miles 9, 25, and 59.
90	**Taokiasü,** P., market village on l. General direction now E.
93	**Hwangshahü,** P., market village on l.
95	**Kinki Si,** P., large village on r. Direction NNE.
102	**TENGYÜN,** P. T., district city on l. at the confluence of the Junghsien River with the West River (see Route 51, mile 23½).

ROUTE 82 (B)

WATLAM TO KWEIHSIEN

Land Route (70 miles)

General direction NW. Route (B) and (C) both pass through wild mountainous country said to be infested by brigands. A small trade by coolie porterage is done along these tracks.

miles	
0	**WATLAM,** P. T. Route starts WNW., crossing western branch of Watlam River.

miles	
17	Route crosses a tributary of the Watlam River, into which it flows opposite Shuenfow (see Route 81, mile 10). Current r. to l. The road now runs parallel to the r. bank of this tributary.
27	Route crosses to l. bank.
	Hingyeh, P. T., small district city situated just above the junction of another small branch of the river.
	The road now crosses a high range of hills. General direction NNW.
40	Descent into the valley of the West River (*Yu Kong*).
45	**Mokkak,** P., market village. A road goes off on l. to **Tai-ling-hü** on the l. bank of the West River (see Route 51, mile 207½).
58	Road passes close to a bend of the West River on l.
70	**KWEIHSIEN,** P. T., walled district city on the l. bank of West River (see Route 51, mile 179½).

ROUTE 82 (C)

WATLAM TO TUNGTSUN

LAND ROUTE (56 miles)

General direction N. by W.

miles	
0	**WATLAM,** P. T.
	Route crosses the high range of hills in which the Watlam River takes its rise.
33	**Putangsü,** P., market village on the northern slope of the range.
56	**Tungtsun,** P., small town on r. bank of West River. Another track reaches the river at **Tawanhü Si,** a few miles farther downstream (see Route 51, mile 162 and 152½).

ROUTE 83

PAKHOI TO NAMHEUNG

Land Route (109 miles)

Authorities: Capt. G. T. Brierley and Mr. G. W. Pearson, July–August 1908; Capt. S. L. Ralph and Lieut. C. C. Chambers, March 1914; War Office Sketch Map, Leem Chau to Nam Heung, no. 447; French 1 : 1,000,000 Map (Hanoï section, 1900); Chinese Map of Kwangtung, 1879; Maritime Customs Reports.

General direction N. This route, which connects the south-west coast of Kwangtung with the West River, here called the Yu Kong, was traversed by Capt. Brierley and Mr. G. W. Pearson at the end of July 1908, and the greater part of it (from Limchowfu to Namheung) by Capt. Ralph and Lieut. Chambers in March 1914. Capt. Brierley's party consisted of 3 Europeans, and their transport comprised 2 ponies, 2 mountain chairs, 1 wheelbarrow, and 12 coolies. The road at that time was pronounced to be fit for wheelbarrows, but not for carts; though it appears that in certain sections—the plains north of Limchowfu and Lingshan—carts are freely used. After the heavy summer rains the road in the marshy parts near Limchowfu was found to be 2 to 3 ft. under water.

Since 1908 a good 15 ft. road has been constructed between Pakhoi and Limchowfu, capable of carrying wheeled traffic up to one ton. In compiling this route it has been assumed that this road follows the line of the old route traversed by Capt. Brierley's party. From Limchowfu to Shekkong (mile 27¼) the country is open and passable by all arms. Beyond this the road narrows in many places to a 3 ft. track and runs among low hills which are generally covered with scrub jungle. Bad patches are frequent, especially in the wet season. The hills are well wooded with firs and lichees, and timber up to a diameter of 6 in. is plentiful. The valleys are generally narrow and cultivated with paddy. There are

some stretches of open plain in which rice, tobacco, and indigo are grown. Other cultures observed were millet, sugar-cane, potatoes, arrowroot, beans, bananas, castor oil, and hemp. The country is well watered, but camping-grounds, even on a bivouac scale, are not frequent.

There is a water route as far as Moli (mile 64¼). Indeed, nearly all the goods traffic is water-borne up to this town, the river being navigable at all seasons of the year for the smaller classes of boat.

miles	
0	**PAKHOI,** P. T. (see *Gazetteer*). For the first 8 miles the road follows the coast line on the l., with flat open grass land on r. A long spit of land runs parallel with the shore as far as Ko-tak. Direction NE.
3	**Ko-tak,** a large fishing town of about 5,000 inhabitants, and port of call for the timber which is floated down the Limchow River. It has a good saw-mill, Chinese-owned. Just beyond the town a small stream is crossed by a stone bridge.
6	**Kung-na-yu,** small village with rest house, and potteries near it. Direction N.
8	The road strikes inland. Country on both sides cultivated for rice, arrowroot, maize, barley, peanut, and oil beans. Six miles to the E. the country is broken, and hills run parallel with the road until near Limchowfu. At intervals along the road are small rest houses.
11	**Konkong,** P. (Chinese Map : Kon-t'ai-shi), town of 4,500 inhabitants, in low-lying and very fertile country. From this point onwards, the road passes over undulating ground, mostly uncultivated.
13	Pagoda on l., a prominent landmark.
16	**LIMCHOWFU,** P. T. (see *Gazetteer*). Route leaves the city by the East Gate, the suburbs extending for about a mile. The road is level and of hard clay, 40 ft. wide, with dry cultivation on either side.

miles

It runs along a plateau, skirting the wide fertile river valley.

16½ Stone bridge with brick pier, 30 ft. long, 8 ft. wide, 2 spans of 15 ft. Depth of stream in March, 1 ft. Current r. to l.

16¾ Branch road on r. to **Chapli** (see Route 75, mile 21·5). Telegraph wire to **Yamchow** branches off on l.

17 Bridge with brick piers, 24 ft. long, 5 ft. wide, 2 spans of 12 ft. Depth of stream 2 ft. Current r. to l.

17¾ Branch road on r. to **Ko-po-tsun,** a small village ¾ mile distant. Width of road 20 ft. Surrounding country under grain.

18¾ Uphill gradient of 1/100.

19¼ Stone bridge with brick piers, 40 ft. long, 5 ft. wide, 2 spans of 20 ft. Depth of stream 2 ft.; current r. to l. The road traverses an undulating down, the steepest gradient being 1/30.

20¾ **Ts'ing-shui-kong,** a scattered village of 20 houses. Road crosses a river flowing from r. to l. by a stone bridge with brick piers, 90 yds. long, 6 ft. wide, 15 spans of 6 yds. Width of stream in March 15 ft., width of river bed 80 yds. Depth of water 2 ft. Banks 6 ft. high. The road, 20 ft. broad, passes along the western edge of a down, which would make a good camping-ground. Dry cultivation and some paddy on l.

21¼ *San-kuan*, temple with 3 obelisks.

21¾ Branch road on r. to Chapli, 18 miles distant.

22¼ Village of 10 houses on l. Branch road on r. to **Namhong,** P., some 20 miles distant near the coast. Telegraph line to Kochow branches off on r.

23¼ Road to **Onpo** on r. The Shekkong pagoda is visible from this point.

23¾ Stone bridge with brick piers, 42 yds. long, 5 ft. wide, 7 spans of 6 yds. Depth of stream in March

miles

$1\frac{1}{2}$ ft. Width of stream 10 ft., width of river bed 30 ft. Current r. to l.

$24\frac{1}{4}$ **T'sat-li-p'o** (20 houses). Cultivated plain on l.; rolling downs on r., where about 30 head of cattle were seen grazing.

$26\frac{1}{2}$ Village of 20 houses.

$27\frac{1}{4}$ Wooden trestle bridge, 40 yds. long, 6 ft. wide, 5 spans of 8 yds. Width of stream 20 yds., depth in March $1\frac{1}{2}$ ft.

Shekkong, P., market town of 200 houses on the l. bank of the Limchow River (see Route 80, mile 162). The river here is 75 yds. wide, and 4 to 5 ft. deep (in March). Width of river bed 150 yds. Fifteen junks were seen at Shekkong; they were 70 to 100 ft. long, 6 to 8 ft. broad, and 1 to $1\frac{1}{2}$ ft. in draught. There is a ferry service of 3 boats, each capable of taking 10 men. The Church Missionary Society have a station here, with a native pastor. Silk and mat-making are the industries of the place. The country between Shekkong and the point where the route crosses the Limchow River (mile $31\frac{1}{2}$) is low and devoted to the cultivation of rice, mulberry, and castor oil.

For the next $1\frac{1}{2}$ mile the road is a lane, 5 ft. wide, between hedges of thick bamboo 8 to 12 ft. high, with dry cultivation on either side.

29 Village of 20 houses. General direction N.

$29\frac{3}{4}$ Stone bridge with brick piers, 21 yds. long, 6 ft. wide, 3 spans of 7 yds. Width of stream 10 ft., depth in March 1 ft.

$30\frac{3}{4}$ Village of 10 houses on r. The road becomes a mud path, 3 ft. wide, leading through the fields.

31 Ferry, capable of taking 10 men at a time, over a river 40 yds. wide and 5 ft. deep (in March). Current r. to l. Banks steep, 10 ft. high.

$31\frac{1}{4}$ Village of 20 houses.

miles

$31\frac{1}{2}$ The Limchow River, flowing from E. to W., is crossed by a ferry of 2 boats, each capable of taking 20 men. The river is 150 yds. wide [1] and 5 ft. deep (in March). Banks steep, 15 ft. high. About 2 miles below this point it is joined by the *Moli River* coming in from the N.

Dochiu, P., market village on the r. bank, with a fair amount of junk traffic. The road, now a track 6 ft. wide, skirts the village. General direction N. by W.

The character of the country now changes ; it is undulating and barren, with Scotch firs growing on the hill sides, and occasionally fertile strips of cultivation in the narrow valleys.

$32\frac{1}{4}$ Stone bridge with stone piers, 10 yds. long, 3 ft. wide, 2 spans of 5 yds. Stream 10 ft. broad, 1 ft. deep (in March) ; current r. to l.

33 Short up gradient of 1/30. For the next $2\frac{1}{2}$ miles road passes over a rolling down.

$35\frac{1}{4}$ Up gradient 1/40. Fir trees up to 6 in. in diameter are obtainable.

$35\frac{3}{4}$ Branch road on l.

$36\frac{3}{4}$ Stone bridge with brick piers, 15 yds. long, 5 ft. wide, 3 spans of 5 yds. Stream 10 ft. broad, 6 in. deep, flowing from l. to r. The surrounding country is a plain with dry cultivation.

$37\frac{1}{2}$ Stream on r. 20 ft. broad, 2 ft. deep, flowing S.

$37\frac{3}{4}$ **Tse-pan** (20 houses). Possible camping-ground for a force up to 1 brigade.

$38\frac{3}{4}$ Branch road on r. The road, now a stony path 4 ft. wide, leads up a hill, gradient 1/20.

$39\frac{1}{4}$ **Luk-kai-shui** (20 houses). From here the road passes up a series of valleys amongst numerous small hills, about 400 ft. high, covered with fir trees. In these valleys, which are not more than 60 yds.

[1] According to Capt. Brierley, the river here was 350 yds. wide at the end of July.

miles	
	broad, some paddy is grown. Their sides are thickly covered with bracken, and tigers are said to abound. Villages are strongly fortified with loopholed palisades.
40	Stone bridge with brick piers, 12 yds. long, 5 ft. wide, 3 spans of 4 yds. Stream 10 ft. broad, 6 in. deep, flowing from l. to r.
41¼	Stone bridge with stone piers, 16 yds. long, 4 ft. wide, 4 spans of 4 yds. Stream 15 ft. broad, 1 ft. deep, flowing from l. to r.
41¾	Village of 15 houses.
42¾	**Shui-mun-t'an,** village of 20 houses.
43	Stream on l., 10 ft. wide, 6 in. deep, flowing SW.
43½	Road crosses stream by a stone bridge of 1 span 5 yds. long, 3 ft. wide.
44¼	Village of 10 houses on l.
44¾	Branch road on l. Road crosses a stream 10 ft. broad, 1 ft. deep, by a stone bridge of 1 span 9 yds. long, 3 ft. wide.
45¼	Village of 15 houses on r.
46	Branch road on r.
48¼	**Ko-lan-tung** (10 houses). Branch road on r. The road still lies in a narrow valley, the sides of which are wooded with fir trees up to 6 in. in diameter and thick bushes and bracken.
49¼	Village of 10 houses.
49¾	Road goes over a col, gradient on either side 1/20.
51	Scattered village of 15 houses on l.
51½	Village of 10 houses.
52¾	Village of 15 houses on l.
53¾	The valley becomes broader, the hills are lower and not so thickly wooded.
54¼	**Ko-ka-t'in** (15 houses).
54½	Road goes over a small hill, gradient on either side 1/20. Possible camping-ground, 100 yds. square. Road approaches to within a mile of the Moli River on l.

miles

55¼ Branch road on l.

55¾ **Kun-shiu-t'ong** (20 houses).

56 Village of 15 houses. Stone bridge with stone piers, 100 yds. long, 5 ft. wide, 20 spans of 5 yds., over a paddy field with a stream, 10 ft. wide, 1 ft. deep, in the middle.

56¾ Up gradient of 1/20. Village of 10 houses.

57¼ Surrounding country hilly, and wooded with fir trees up to 1 ft. in diameter.

57½ **Pak-shek-shui,** market village (100 houses). Country becomes more open, the valleys in which paddy is grown are broader, and the hills lower.

58 Up gradient of 1/30. Possible camping-ground, 100 yds. square.

59¼ Village of 10 houses.

59¾ Stone bridge on stone piers over a small affluent of the Moli River : length 20 yds., width 3 ft., 5 spans of 4 yds. Stream 6 ft. broad, 1 ft. deep.

60 Village of 10 houses on r. Cross roads.

61 **Lo-mung-ts'ung** (20 houses).

62 Road goes over a hill, gradient on either side 1/30. Surrounding cultivation, rice and tobacco.

63 Road meets Moli River on l.

64¼ Ferry over *Moli River*, here 30 yds. wide, 4 ft. deep (in March) : 2 boats, each capable of taking 10 men at a time.

Moli, P. T., market town of 300 houses on the r. bank of the river, which is crossed by a ferry of 2 boats, each capable of taking 10 men at a time. Junks from Limchowfu come up to this point, but can get no farther. Their capacity is about 6 tons, and their draught 2 to 2½ ft. loaded. Exports from Moli consist chiefly of indigo and sugar. The Church Missionary Society has a station here under a native pastor.

Route follows the r. bank of the river. General direction N.

miles	
64¾	Branch road on l. Camping-ground, 200 × 100 yds.
65	Road crosses the river by a wooden trestle bridge of 8 spans, 45 yds. long, 2 ft. wide. The river is 40 yds. wide, and 4 ft. deep (in March). Banks steep, 8 ft. high.
65¾	Branch road on l. For the next 2 miles the road is 10 ft. wide.
66	Moli River on l., flowing S. The road runs up the valley of this river for 5 miles. Cultivation consists of rice, tobacco, and indigo.
67	Stone bridge with stone piers, 9 yds. long, 3 ft. wide, 2 spans of 4 yds. Stream 10 ft. wide, 1 ft. deep, flowing r. to l.
67¼	Village of 10 houses.
67¾	Village of 10 houses.
68½	Road narrows to 5 ft. and ascends at a gradient of 1/50.
69¼	Village of 20 houses.
70¼	Village of 20 houses.
71	Branch road on l., leading NW. The road leaves the valley of the river and goes up a valley on r. through a wood of bamboo, fir and lichee, from which timber up to 1 ft. in diameter might be obtained.
71¼	Bridge with stone arch, 10 yds. long, 6 ft. wide. Stream 10 ft. wide, 1 ft. deep, flowing r. to l.
71¾	Village of 20 houses on l.
72¾	**Luk-wai-tsun** (30 houses) on l. Road becomes a mud embankment 3 ft. wide between paddy fields.
73¼	Road ascends at a gradient of 1/30.
73¾	Village of 10 houses.
75	Village of 15 houses. Branch road on l.
75¼	Bridge with stone arch, 10 yds. long, 4 ft. wide. Stream 10 ft. wide, 1 ft. deep.
75¾	Stone bridge with 3 arches, 18 yds. long, 6 ft. wide ; stream 20 ft. wide, 6 in. deep, flowing r. to l.
	Village of 10 houses.

miles

77¼ Road goes over a col ; gradient on either side, 1/30.

78¼ Road goes over a hill, gradient of 1/30. Lingshan rocks, 1 mile distant from Lingshan, are visible from this point. These are precipitous, craggy formations, honeycombed with caves from which a very fine marble is quarried.

78¾ **Sha-tak,** village of 50 houses on l.

79½ Stone bridge with 3 arches, 18 yds. long, 8 ft. wide ; stream 10 ft. wide, 1 ft. deep, flowing r. to l. This stream, and those crossed at mile 83¼ and mile 84½, are all tributaries of the Yamchow River on its l. bank. Possible camping-ground, 200 × 100 yds.

80¼ The road enters a wide plain of paddy cultivation, with hills on the E. ¼ mile distant. The plain extends N. for 5½ miles and is dotted with villages about ¼ mile apart, each of 10 to 20 houses.

80½ Stone causeway, ¼ mile long, 7 ft. wide.

81¾ Rising ground on r. Hill 1,800 ft. high, with obelisk, about 5 miles distant.

83¼ Village of 10 houses. Stone bridge on stone piers, 18 yds. long, 5 ft. wide, 3 spans of 6 yds. Stream 10 yds. wide, 6 in. deep, flowing r. to l.

84½ Bridge with stone arch, 10 yds. long, 4 ft. wide ; stream 10 ft. wide, 1 ft. deep, flowing r. to l.

85¾ Road skirts a hillock on r. at the end of the plain.

86¼ Village of 20 houses.

87¼ Road crosses upper course of *Yamchow River* by a fine stone bridge of 7 arches, 100 yds. long, 18 ft. wide ; parapet 2 ft., height above the water 15 ft. The river is 30 yds. wide, 2 ft. deep (in March), and flows from E. to W.

88¼ **LINGSHAN,** P. T., district city (see *Gazetteer*). The road turns to r. after crossing the river, and enters the town by the West gate. Leaving by the same gate, it runs through paddy and tobacco cultivation. General direction from here to Namheung, NW.

miles	
	After Lingshan, the road is generally rugged, passing most of the way among rocky hills varying much in height. Buffalo carts now take the place of wheelbarrows along the route.
88¾	Branch road on r.
90	Road ascends a hill, gradient 1/50.
90¼	**Chuk-kai-t'ong** (50 houses). Surrounding country paddy and hills with fir trees up to 6 in. in diameter.
91¼	Top of hill; down gradient 1/50. Road crosses a plain of paddy.
92¼	Hill with gradient of 1/20.
92¾	Top of hill.
93½	Bridge with stone arch, 6 ft. wide; stream 7 ft. wide, 1 ft. deep, flowing r. to l.
94¼	Village of 15 houses on l. Road descends at a gradient of 1/60.
96¼	Village of 15 houses. Branch road joins from l.
97¾	Village of 15 houses on r.
98	Branch road on l.
98¼	**Ping-nam,** village of some 300 inhabitants. The road meets a stream on l., 12 ft. wide, 1 ft. deep, flowing NNW., and follows its valley for 4½ miles. On this stream, which is a tributary of the Yu Kong, there are waterwheels at frequent intervals, automatically irrigating the paddy fields on a higher level.
98¾	Stone bridge on stone piers, 40 yds. long, 3 ft. wide, 5 spans of 8 yds. Stream 12 ft. wide, 1 ft. deep, flowing from r. to l. into the stream mentioned at mile 98¼.
99	Village of 20 houses on r.
100¼	Village of 15 houses. Road ascends a gradient of 1/30. Fir trees on the slopes to r. and l.
101	Boundary of Kwangsi Province, marked by a small stone.
101½	**Ping-nam-lin** (20 houses). Possible camping-ground 100 yds. square. Road crosses the stream (see mile 98¼) by a wooden trestle bridge 30 yds.

miles

long, 1 ft. wide. The stream here is 20 yds. wide and 1 ft. deep.

102¼ **Tam-an-ts'un,** village with brick kilns.

102¾ Bridge on stone piers, 25 yds. long, 3 ft. wide, 4 spans of 6 yds. Stream 20 yds. wide, 2 ft. deep. Road leaves the stream at this point.

Village of 10 houses.

103¾ *Shek-yan* ('Stone Man'), a steep rock above the road on l. Road ascends a narrow valley, the gradient varying from 1/20 to 1/50. The path is of hard clay with rocky outcrops, and is only 4 ft. wide.

106¼ Top of the col. Down gradient 1/30.

106½ Village of 20 houses. Path 5 ft. wide and very rough.

107¼ Down gradient of 1/30.

107¾ Stone bridge on stone piers, 18 yds. long, 6 ft. wide, 3 spans of 6 yds. Stream 15 yds. wide, 2 ft. deep, flowing r. to l.

109 **NAMHEUNG,** P., a long rambling market town of 200 houses on the r. bank of the Yu Kong (see Route 51, mile 264). Fifteen river junks were seen at anchor here. It is a stopping place for the Wuchow–Nanning motor launches. There is a branch of the Kiel Mission in the town.

ROUTE 84

PAKHOI TO YAMCHOW

Land Route (62 miles)

Authorities: French 1 : 1,000,000 Map (Hanoï Section, 1900); War Office Postal Map no. 446; War Office Sketch Map no. 272; Chinese Map of Kwangtung, 1879; Maritime Customs Reports.

General direction WNW. This is one of the roads the improvement of which is included in the Chinese official programme. In April 1914, a good 15 ft. roadway had already been built as far as Limchowfu (see Route 83), and

for 2 miles beyond, but it is not clear that the work has been continued. Between Limchowfu and Yamchow the route passes through well-watered rolling country, but no detailed information is available. Numerous streams are crossed, including the Limchow and Yamchow rivers. The route follows the telegraph, and eventually it is probable that a railway will be built along the same line. Merchandise is mainly carried by sea from Pakhoi to Lung-mun and thence up the river to Yamchow. Between this town and Nanning a busy trade formerly existed, but it has greatly diminished since the opening of the West River.

miles	
0	**PAKHOI,** P. T. (see *Gazetteer*). For details to mile 16 see Route 83.
16	**LIMCHOWFU,** P. T. (see *Gazetteer*). Route leaves by the westernmost of the two North gates and crosses the Limchow River.
18½	**Tsung-kong-hau,** village on r. bank (see Route 80, mile 177½). Direction WNW.
25	**Hai-yang,** village on r. bank of a small stream. Branch road on l. to **Shakong** (P.) at the mouth of the stream, about 3 miles distant.
29	**Sha-tsz-pu,** village.
31	**Wuka,** P., market village on the r. bank of a small river. Route turns NNW.
33	**Fan-tsz-leung,** village on the l. bank of a river flowing SW.
34	**Tan-sa,** village. Hills on l.
39	**Kao-pu,** village. Route turns W.
41	Route crosses a stream.
42½	**Nalai,** P. T., market village.
44½	**Ma-ngan-lan,** village. The road now crosses a ridge.
47	**Sha-ling,** village. Route descends into a plain. General direction W.
50	**P'ing-ngan-hü,** market village on the banks of the *Tan-chuk Kong,* a river flowing S. The road crosses a low ridge of hills.

miles	
54	**Fan-kai,** large village on another branch of the Tan-chuk Kong.
62	**YAMCHOW,** P. T. (see *Gazetteer*), large town on the W. bank of the *Ngau Kong* or Yamchow River (called Kwang Ho on the Missionary Map, and Kiou Kiang on the French Map).

ROUTE 85

YAMCHOW TO LINGSHAN

Land Route (69 miles)

Authorities: French 1 : 1,000,000 Map (Hanoï Section, 1900); War Office Postal Map, no. 446; Chinese Map of Kwangtung, 1879.

General direction NE. This route follows the valley of the Ngau Kong or Yamchow River. No details are available. Distances are approximate only.

miles	
0	**YAMCHOW,** P. T. (see *Gazetteer*). Route starts N. by E. along the r. bank of the *Ngau Kong*.
15	**Na-mi,** village on r. bank of river.
20	**Ngau-kong-hü,** market village. Road and river bend NE.
32	**Pingkuthü,** P., large market village.
36	**Lao-sha,** village.
38	Route crosses small tributary.
45	Another small tributary.
	Lukuk, P. T., market village.
58	Route crosses a bend in the river, passing to the l. bank.
60	**Tanhü,** P., market village. Routere crosses to r. bank.
69	**LINGSHAN,** P. T. (see *Gazetteer*). From here there are two routes to the Yu Kong: one by land to Namheung (see Route 83, mile 88¼ et seq.), and another, mainly by the Sha-p'ing creek, which is used for the salt traffic from the West River to Yamchow (see Route 51, mile 271).

ROUTE 86

YAMCHOW TO NANNING

Land Route (102 miles)

Authorities: French 1 : 1,000,000 Map (Hanoï Section, 1900); Chinese Map of Kwangtung, 1879; Maritime Customs Reports.

General direction N. by W. This is one of the old trade routes for goods sent from the coast of south-western Kwangtung into Kwangsi and Yunnan; but it has lost much of its importance since the French development of Tonkin and the opening of the West River. No details of the road are available, and the distances, measured on the map, are only approximate. There is a scheme for a railway to be built under French auspices along the line of this route (see p. 160).

miles	
0	**YAMCHOW,** P. T. (see *Gazetteer*). The route leaves the city on the N. and runs NNW., obliquely across a range of hills, into the valley of the *Na-mung Kong,* an upper branch of the *Yü-hung Kong* which flows into the Lung-mun estuary below Yamchow.
30	**Siutung,** P. T., market town. Route approaches the Na-mung River on l.
43	**Cheung-t'an,** large market village on the l. bank of the Na-mung River. Route now crosses the river and follows the r. bank of an upper branch.
49	**Na-chung,** village. Route ascends a range of hills.
55	**Pakchaihü,** P., market village in the mountains on the Kwangsi border. The route now enters Kwangsi, and after traversing about 5 miles of that province, re-enters Kwangtung.
60	**Na-siao-fan,** village on Kwangtung border.
66	**Lok-po-to,** village.
75	**T'un-lu-hü,** market village on the r. bank of an upper tributary of the *Pak-chik Kong* which flows

miles	
	into the Yu Kong near **Pumiao** (see Route 51, mile 346). The Kwangsi border is recrossed a few miles farther on, and the route continues in that province.
82	**Na-man,** village.
87	**Na-lien** (French map) or **Nan-li** (Chinese map), village on the r. bank of a tributary of the Pak-chik Kong, flowing l. to r.
96	**Kong-wa-hü,** market village on the r. bank of the *Yu Kong* (see Route 51, mile 359), which is crossed at this point. A road leads WNW. to Nanning from the northern bank.
102	**NANNING,** P. T., a treaty port on the l. bank of the Yu Kong. See Route 51, mile 371.

ROUTE 87

YAMCHOW TO MONCAY

Land Route (51 miles)

Authorities: French 1 : 1,000,000 Map (Hanoï Section, 1900); War Office Postal Map, no. 446; Gallois, Atlas général de l'Indo-Chine française; *China Sea Pilot*, vol. 3; Chinese Map of Kwangtung, 1879.

General direction WSW. This route, which connects Yamchow with Moncay, in Tonkin, is traced entirely from maps. It follows the line of the telegraph, but no detailed information is available. Four rivers are crossed, flowing more or less parallel to one another in a south-easterly direction, with ranges of hills between them. Distances are approximate only.

miles	
0	**YAMCHOW,** P. T. (see *Gazetteer*). The route leaves the city on the S. side, and runs in a general south-westerly direction, keeping on low ground with hills to the r.

miles	
12	The *Yü-hung Kong* (see Route 86, mile 0) is crossed at its confluence with the *Fung-wong Kong*.
13	**Tsing-tsan-ping,** village. Route continues SW. across a low range of hills.
19	**Fangcheng,** P. T., small district city on the l. bank of the Fangcheng River, which is now crossed. The route turns due W. across the base of *Pak-lung peninsula*.
25	**Xa-xau** (Chinese map : **Ju-hsi**), village. Route now turns SW. to the coast.
27	**Son-giot** (or **Shan-kiok**), village at the head of Oanh Xuan bay. There is secure anchorage in the bay for vessels of light or moderate draught. Route follows its northern shore in a westerly direction, crossing several small streams.
34	**Kong-ping** (or **Kong-t'ien**), village on the l. bank and at the mouth of the *Ho-hung Kong*, which is crossed at this point. Route leads SW., keeping within a mile or so of the coast.
42	**Som-pak** (Sung-po-hsün), village on the coast. Route turns W. through low-lying country.
46	Small stream crossed.
47	**Lo-t'ou,** village.
47¾	Stream crossed near village of **Tou-kiu.**
49	**Tunghing,** P. T., town at the head of the *Shuk-shan River* delta, the eastern arm of which forms the boundary between Kwangtung and Tonkin. A French vice-consulate was established here in 1895. Route crosses Shuk-shan River and turns S.
51	**MONCAY,** a small town on the E. frontier of Tonkin, situated on the l. bank of the western arm of the delta, 7 miles from the sea. The river can only be ascended by junks, with local knowledge, but there is a considerable trade. The population is mainly Chinese

SECTION III

GAZETTEER OF CITIES AND TOWNS

AICHOW

Approximate { Latitude, 18° 23′ N.
Longitude, 109° 12′ E.

Authorities : China, Maritime Customs Reports ; F. Hirth, Walled Cities of Kwangtung, 1881 ; R. Swinhoe, Narrative of an exploring visit to Hainan.

Aichow (Yai-chou) is an old walled town in the south of Hainan, which has evidently been of some importance in the past. It is situated on the right bank of the Pao-yang river about 7 miles from the sea. Its walls are about two miles long and 20 ft. high, with three gates. There are suburbs on the east and west sides, that on the east being the more important. It is now chiefly noted as a centre of the pig trade, and as a place of distribution for salt. Its port is Kam-oui, at the mouth of the river, and the population of the two towns is said to total about 8,000. There is a good junk harbour within the bar, but the outer anchorage in Aichow bay is exposed (see p. 181). Rice, tobacco, and sugar are cultivated in the neighbourhood.

Distance from Aichow

To Kachek by land	158 miles	Routes Q and R

AMPOW

Approximate { Latitude, 23° 25′ N.
Longitude, 116° 40′ E.

Authorities : Official Guide ; Maritime Customs Reports.

Ampow (An-fou) is situated on the Han River delta about 7 miles north of Swatow. It stands on rising ground and is

a favourite place of residence for Swatow merchants. The **population** has been estimated at 20,000. It exports coarse chinaware, fibres, jute skin, macaroni and vermicelli, molasses, fresh fruit, feathers, hemp thread, and salted turnips.

There is a Chinese post office of the second class; and a station on the *Chao-Shan Railway*.

Distances from Ampow

To Swatow	by rail	6 miles
Chaochowfu	,,	18 ,,

CANTON (see Plan)

Authorities: Maritime Customs Reports; Military Report; Official Guide; Madrolle, Chine du Sud; China Sea Pilot; Directory and Chronicle of China, &c., 1916; Henry, Lingnam; Hurley, Tourist's Guide to Canton, &c.; Gray, Fourteen Months in Canton, &c.

Situation—History—General description—Population—Walls—Approaches by Pearl River—Harbour—City and Suburbs—Foreign Concession—Surrounding country—Climate and hygiene—Schools, Hospitals, and Missions—Police—Fire Brigade—Trade—Industries—Supplies—Internal Communications—External Communications.

Situation

CANTON or Kwangchowfu (latitude 23° 6′ 9″ N., longitude 113° 16′ 2″ E.), the capital of Kwangtung province and the first port in China opened to foreign trade, is situated on the left bank of the Chu Kiang (Pearl River), more popularly known as the Canton River, near the apex of the network of creeks known as the West River delta, into which flow the West, North, and East Rivers.

Opposite the walled city and across the river are the two suburbs Honam and Fati, which practically form part of Canton.

History

There has been a city at this point for over 3,000 years. In the Chou period (1100–250 B. C.) the region was known as Nan-hai, 'South Sea', and the city as Nan-wu; later it was a tributary state called Po-yüeh. It became a province

under the Ch'in or Ts'in dynasty (250–200 B. C.) and, after a short period of independence, again under the Han dynasty (200 B. C.–A. D. 200). Up to the Sui dynasty (A. D. 600) the city was called Kwangchow for centuries, but under the Sui it was named Fanchow. The old name, Kwangchow, was restored by the T'ang dynasty (A. D. 600–900). The Ming dynasty (A. D. 1368–1644) formed the province as now constituted and calling it Kwangtung, 'East (portion of the old) Kwang(nan),' the city was made the capital of the province and given the same name. The Portuguese, who were the first Europeans to reach it at the beginning of the sixteenth century while the Mings were still ruling, rendered Kwangtung by 'Canton'. The Manchus retained the provincial boundaries and the provincial name, but they restored the old appellation of the city and the official name, Kwangchowfu, has been in use for the last three centuries.

A popular name is Yeung-shing (Yang-ch'êng), 'the City of Rams', from the legend of the Five Immortals who rode into Canton on five rams in the time of the Chou dynasty.

From its favoured position Canton forms the great collecting and distributing centre for the trade of the district drained by the West, North, and East Rivers with their tributaries. For this reason it became at an early date a centre of attraction for the traffic of the west, and the history of Canton may be said to be the history of trade in the Chinese empire. Arab navigators had been making regular voyages between Canton and the ports of western Asia as early as the ninth century A. D., but it was not until the sixteenth century that Europeans visited the port. In 1516 the Portuguese found their way thither, and about 100 years later the Dutch appeared upon the scene. These were followed by the English, who founded in Canton the trade which was conducted by the agents of the East India Company, until 1834 when their monopoly ceased.

During these two centuries the Chinese Government refused admittance, not only into the interior of the country, but even into the city of Canton, to all foreigners, and the trade was

compulsorily carried on with a limited body of native merchants who were held responsible for the payment of duties as well as for the behaviour of the 'barbarians'. This body was called the Co-Hong, from the Chinese word Hong which means 'firm'. With the cessation of the East India Company's monopoly the oppressive restrictions of the Canton authorities created more and more friction, and a demand for the surrender of all opium in foreign hands without compensation eventually ended in the outbreak of the First China War (1839–42). The Treaty of Nanking (1842) terminated the Co-hong, but notwithstanding the provisions of this treaty foreigners were still denied admittance into the city, and friction continued until hostilities were again provoked by the *Arrow* incident (1856). The factories or foreign residences were pillaged and burnt in December 1856. A year later the city was captured by a British force, and it remained in British occupation until the Treaty of Tientsin (1858) and the Convention of Peking (1860) inaugurated a new era of commercial and political relations.

General Description

Canton comprises the walled city with four suburban districts Tung-kwan on the E., Sai-kwan on the W., Nam-kwan on the S., and the foreign settlement on the island of Shameen in the south-west corner. The districts of Honam on Honam Island across the Pearl River and of Fa-ti which faces Honam and Shameen across the Pearl River are also included in a broader definition of Canton.

Estimates of the **population** of Canton vary enormously, in the absence of reliable statistics. A reputed census in 1912 gave the total as 665,285 but this is known to be inaccurate and greatly to under-estimate the amount. On the other hand one estimate places the figure as high as 2,500,000 which even if it include the widest range of suburbs is certainly exaggerated. Probably it would be nearer the mark to put the population of Canton at about 1,000,000, including 120,000 Tan-min (see p. 37) or river population who live entirely on boats.

The Walls.—The city proper is about 2 miles in breadth and is surrounded by a wall from 15 to 25 ft. thick, from 25 to 40 ft. in height, and about 6 miles in circumference. This wall is pierced by 15 gates, two of which are water-gates. A wall 6 to 8 ft. thick running east and west divides the city into two unequal parts, the northern and larger of which is called the 'Old City', and the southern the 'New City'. This wall is pierced by four gates and two water-gates, one at each extremity.

The foundation of the walls is of red granite; they are faced with brick and stone, and backed with earth on the inside. Those of the 'Old City' were built in the eleventh century, and the 'New City' wall was finished in 1568. A ditch surrounds the outer wall, and several creeks penetrate the city. On the N. side of the city where the ground rises, this ditch is dry, but nearer the river, the canals fill with the rise of the tide and empty at low water.

After the establishment of the Republic, the demolition of the city walls was commenced, but was discontinued in October 1912. At present both the walls and surrounding ditch are practically useless, the ditch being largely filled in and the walls hidden by shops and houses.

River Approaches

The approach to Canton is difficult for vessels of deep draught owing to the bars, sand-spits, and other obstacles[1] in the Pearl River. It is in fact inadvisable for vessels of over 17 ft. 6 in. draught to attempt the passage at high-water springs, and for those over 15 ft. 6 in. draught at high-water neaps; and it may be necessary even for vessels within these limits to unload cargo before reaching Canton itself.

[1] Not content with the natural obstacles of the river the Cantonese erected in the past numerous artificial barriers to control foreign shipping. In 1905 the various barriers and artificial obstructions were partially removed in pursuance of the treaty of 1902. Among them Bridge Barrier and High Island Barrier were entirely removed: and Iron, Taishek, Cambridge, and Whampoa Barriers were partially removed.

Ships sailing up the estuary enter the Pearl River through the Chuen-pi channel passing between the islands of A-nong-hoi and Tai-kok-tau. The strongly fortified islands of Wan-tong abreast A-nong Point and the foot of the Point itself are known as the Bogue Forts. The Wan-tong islands divide the river east and west into two channels, respectively known as the Boca Tigris (or Bogue) and the Bremer. Tiger Island lies a few miles north-west of the Wan-tong group.

The **Bogue** is the usual channel for navigation, and steamers proceed along it to Second Bar, a collection of shoals three miles in length lying off and above Second Bar Creek and stretching across the channel. Second Bar Creek is between Pottinger and Parker Islands and connects the Bogue with the East River. Proceeding N. to Belcher Reach and through it to First Bar Island, ships pass First Bar above which Danes Island divides the channel into (1) Whampoa Channel and (2) Blenheim Passage.

Blenheim Passage, the longer but deeper route, is that taken by steamers of deep draught. It leads past Collinson Barrier and High Island, through Brown Reach, Maitland Passage, and the Taishek Barrier into Macao Fort Reach, or Back Reach, and past Honam Point to Shameen anchorage, a distance of about 17 miles. Vessels of 21 ft. draught stop at an anchorage below Hamilton Creek and just short of the Taishek Barrier; and though it is generally stated that vessels of 17½ ft. draught can proceed to Canton, the depth of water at the Taishek Barrier, Parker Point Bar, or Honam Spit[1] cannot be relied on.

Whampoa Channel between First Bar Island and Number 4 Flat Island leads through Cambridge Reach and Cambridge Barrier to Whampoa, a city on the N. of Danes Island, eight miles from Canton. Whampoa can be reached by vessels of

[1] The survey in 1916 established that there was 14 ft. of water at low water springs over Honam Spit. There was only 9 ft. in 1900. It is supposed that the reclamation of the Yüeh-Han Railway's property at Wongsha is responsible for this phenomenon as well as for the bank which formed in recent years off Shameen.

23 ft. draught crossing Second Bar at high water ; and there is good anchorage in the English and American Reaches W. of the town. From here the passage to Canton is not attempted by vessels drawing more than 11 ft. The two main channels, the Whampoa and the Blenheim, meet at Honam Point opposite Shameen. For the last six miles the Whampoa Channel is lined with boats packed in rows, and backed in places by rows of wooden huts built on piles.

The Harbour

The harbour limits are : southern limit, a line drawn E. and W. through Macao Fort : western limit, a line drawn S. 66° W. from the Five-story Pagoda : eastern limit, a line drawn S. 25½° W. from Chunlung Creek.

Bunding has been carried out on an extensive scale and numerous wharves and jetties have been built in recent years in both Front and Back Reaches. On the N. side of Front Reach the bund wall is complete from Shameen to East Creek and all wharves are now constructed of steel and concrete. On the S. side of the Front Reach a bund has been constructed at Honammei in front of the Kwangtung Cement Works ; and it was decided in 1915 to build a bund-wall round the site of the Red Fort which was to be demolished.

In the Back Reach the frontages of various properties have been bunded, e. g. from Fairyland Creek to the Berlin Mission, the Asiatic Petroleum Co., Hamburg-Amerika Co., Standard Oil, &c. on the right bank, Messrs. Butterfield and Swire's property on the left bank. In West Reach the property of the Yüeh–Han Railway is bunded to the extent of 1,700 ft.

From Shameen to West Creek and in the Back Reach there are numerous wharves and jetties ; and the China Merchants Steam Navigation Company have built large wharves and godowns at Pak-hin-hok on Honam Island, about 2 miles below Shameen, for the unloading of ocean-going vessels to enable them to proceed to Canton.

The Front Reach is crowded with native shipping, passenger-boats, the floating houses of the Tan-min or water people, and

flower boats. The rise in the river due to floods in the West and North Rivers is an annual occurrence and sometimes results in serious inundations. The worst of these occurred in July 1915 when the water in Canton harbour rose 15 ft. above the Customs' zero, flooding Shameen, Nam-kwan, and the low-lying districts NW. of Canton. A conservancy board under the direction of Admiral T'an has been engaged in making surveys of the river with a view to obviating this danger in future.

A scheme is on foot to reclaim Kuper Island, and to lay it out as a residential suburb on foreign lines for Chinese returned from abroad. Kuper Island is a low-lying piece of land about 5,500 ft. long and 1,800 ft. wide, situated in the Front Reach just below the eastern harbour limits and beyond Tai-sha-tau railway station. The scheme involves the filling in of 2,500,000 cubic yards, bunding, and connexion with the mainland either by a reinforced concrete bridge, or by closing the dividing creek and allowing it to silt up. A temporary bridge has been erected for the easier conveyance of the filling-in material from the north bank, which consists for the most part of bricks from the demolished walls. The bridge is having the effect of seriously silting the creek by which stores are brought by river to the Canton–Kowloon Railway terminus and consequently of causing a great congestion in this creek.

Much progress with the reclamation work was made in 1915 and early in 1916, but since April of the latter year the work has been practically at a standstill. Altogether there are now some 4,500 ft. (including the wall of the ornamental water) of bund wall completed, and the whole area filled in to surface level, i. e. 12 ft. above zero, amounts to 814 *mou* (about 136 acres).

The City and Suburbs

Canton city is roughly square in shape, with its main streets running in parallels N. and S., and E. and W. Except in the extreme north, it stands on flat ground; and within the walls it possesses the usual characteristics of a Chinese city.

The numerous large *Yamens*, e. g. those of the former Viceroy and the Tartar General, provide good open spaces suitable for camping-grounds for troops. On the other hand the streets are narrow, some barely 6 ft. in width and shut in by awnings hung across, and the houses are low and closely built. The streets are paved with Hongkong granite and are more or less dirty, with a surface sewer as a rule in the centre, 2 ft. wide and 3 ft. deep, just beneath the stone pavement and built of sandstone, brick or tile. While these sewers are often clogged, they are also frequently flushed, since about half of them—more particularly those outside the walls—are reached by tide-water each day. The streets are better in the suburbs and in districts where they have been renewed after fires. Generally speaking the commercial part of the city is substantially built.

The whole city is roughly divided into four by two long streets—one running N. and S. and called the Tai-pek-chi-kai in the upper part, the Sz-pai-lau in the middle, and the Sui-chi-kai where it passes through the New City; the other, which runs E. and W., is called the Wai-oi-kai. The S. wall of the Old City forms a further subdivision. Taking the four quarters in turn:

(1) In the **north-eastern quarter** are a number of official buildings, old and new: the old Prefectural Offices in the centre of the Wai-oi-kai; the Prefectural Government Office in the same street near the E. gate; the Court of Justice in the Tin-ping-kai; the Provincial Military Governor's Office N. of the Tin-ping-kai, and below this the former Military Governor's Office in the Kuk-tsin-kai. The extreme northern section between the great and little north gates is hilly ground, comprising the Kun-yam Shan with its temples, the Kun-yam-miu, and the Lung-wong-miu, besides the San-yüan-kang, and the Yüt-sau Shan, the highest point of the city. On this last is the so-called Five-storied Pagoda (Wu-ts'êng-lou), a massive square building commanding a good view of Canton, which was occupied by the British troops in 1857.

(2) The **north-western quarter** contains the Wa-tap, an

octagonal, nine-storied pagoda, 270 ft. high and one of the landmarks of Canton. North of the Wai-oi-kai the city is less crowded than in the southward parts.

(3) The **south-western quarter** contains the Kwong-tap, the Mohammedan Pagoda, standing conspicuously on an elevation with a plain tower 160 ft. high. It stands in the Kwong-tap-kai and is said to have been built in the ninth century. Below this in the New City are the conspicuous spire and building of the Roman Catholic Cathedral in the Tai-sen-kai, in a district noted for its rich shops of fancy goods.

(4) The **south-eastern quarter** contains numerous schools and temples, including the former Examination Hall, a large building by the East Wall. In the Sheung-mun-ti-kai is the old water-clock of Canton.

The **suburbs** of Canton are large and important, extending fully four miles along the river front, the eastern suburb, **Tung-kwan,** being the smallest.

The southern suburb, **Nam-kwan,** lies between the wall of the New City and the Pearl River, and it is flanked on the E. and W. by the East and West Creeks. On the S. it is bordered by the bund and the Cheung-tei, a fine road stretching from Shameen to Tai-sha-tau station. At the W. end of this road are the Customs House and the wharves, and at the E. end the Police Office and some coal-yards, and along the front are many fine buildings and stores.

The western suburb, **Sai-kwan**, is the largest and has many fine streets and residences. It contains several noted temples, including the Wa-lam-tz and the Cheung-shau-tz, which are situated together in central Sai-kwan. Of the streets the Shêp-pat-pou contains the newspaper offices and important shops and stores : the Tai-ping-kai along the wall of the New City is a street of banks and money-changers, as well as of silk-merchants ; the Sen-tau-lau below it has shops of fine porcelain, and the Sha-kee-tai-kai at the back of Shameen has shops for pottery, general goods, and grains. It is noteworthy that shops of the same kind are commonly grouped together at Canton. Shameen lies off the southern edge of

Sai-kwan; and Wongsha with the terminus, bund and wharves of the Yüeh-Han Railway is at the south-western extremity.

The Foreign Concession

After the **Shameen** (Sha-mien), a sandflat, as its name implies, had been appropriated as a foreign settlement in 1859, steps were at once taken to transform it into an artificial island. A canal, 100 ft. wide, was dredged between it and Sai-kwan, and masonry embankments built, the construction taking about two years to complete. The cost of the undertaking amounted to $325,000 (about £25,000), four-fifths of which were defrayed by the British and one-fifth by the French Governments, the reclaimed land being occupied by the two Governments in proportion. Up to 1889, however, most of the French concession remained unutilized.

Its shape is a narrow oblong about 44 acres in area with extreme length about 900 yds. and extreme width about 300 yds.; and it is now a well-planned and well-built town with good roads shaded by trees, of which Park Avenue traverses it from E. to W. and a promenade runs along the bund. Two stone bridges connect Shameen with the mainland—one situated close to the British Consulate, and the other to the E. of the French Concession. There is a good drainage system, a special water supply with intake on the river front, water-tower and installation on the 'Candy system', and electric light. Most of the European population of Canton resides at Shameen, and there are besides the foreign consulates, banks, post offices, and business houses. There are two churches, French and English, in the respective concessions. It is perhaps the healthiest residential place in southern China

Close by is the anchorage for steamers, but no Chinese boat is allowed to moor at Shameen. The facilities of the bund were improved in 1913 by an iron-screw pile jetty projecting 50 ft. into the river near the English steps, to serve as a landing place for launches and as a protection for the

water-works intake. An extension of Shameen by reclaiming a large bank of silt at its western end has been projected.

The consulates at Shameen include the American, Austro-Hungarian, Belgian, British, Dutch, French, German, Italian, Japanese, Portuguese, Swedish and Russian. There are British, German, French and Japanese post-offices, and the banks include the Hongkong and Shanghai, Chartered Bank of India, Australia and China, Deutsch-Asiatische Bank, International Banking Corporation, Banque de l'Indo-Chine.

The number of European inhabitants of Canton is estimated at about 700 and most of them reside in Shameen.

Some idea of the foreign interests involved can be obtained from the assessable value of the land plots on the Shameen, which amounted in 1912 to $1,875,000 (about £187,500), while the buildings were estimated to be worth $2,000,000 (about £200,000).

Government of the Concession.—As in the case of all other parts of China, foreigners are judicially subject to the immediate control of their Consuls, British subjects being under the jurisdiction of the Supreme Court of Shanghai, established in 1865. Chinese residing in the Concession are subject to their own laws administered in the Canton police courts. In suits where one of the parties is a Chinese and the other a foreigner, the case is tried either in the native or consular court, according to the nationality of the defendant.

In local affairs the foreign residents, and also the Chinese within concession limits, are governed by means of the Municipal Council, the members of which are elected by the ratepayers. The Council is mainly concerned with finance, police and public works, and its actions are subject to the veto of the consuls.

Police.—There is a small body of municipal police, consisting of 1 British superintendent, 3 native sergeants, 8 native constables, and one interpreter.

The Chinese Government also provides a force for the protection of the Shameen, known as 'the Shameen Chinese Guard'. It consists of 12 officers, 24 non-commissioned

officers, and 342 rank and file. They man three guard boats and have a guard house at the French Bridge. In addition there are 74 men of various ranks at the steamer wharves and Custom House. The officers are armed with Lee-Metford rifles, the rank and file with an old pattern German rifle, while a few have revolvers

At night the gates leading to the city are closed, and the settlement is patrolled by the municipal police. All Chinese moving in the streets at night are compelled to carry a light.

Volunteers.—A small volunteer defence corps, raised in May 1911 under the auspices of the Shameen Municipal Council, exists in the Shameen. It is composed of Shameen residents irrespective of nationality, and numbers 40 members (June 1914). Drill takes place twice a week and target practice at short ranges is carried out. The corps is provided with a machine gun field carriage for use with a maxim gun borrowed from a gunboat in port. A special detachment is told off to this. A scheme of defence is in the hands of the Municipal Council to guard against sudden emergencies.

Occupation of the Shameen by British Troops in 1911–13.—During the revolution of 1911–12 and the counter-revolution of 1913, the Shameen was considered to be in danger of attack by some of the numerous bands of hastily raised levies. The defence was entrusted to the naval authorities who, on November 9, 1911, landed a force of 100 sailors and marines for this purpose. In response to a request by the Commander-in-Chief, China Station, these were relieved on December 23, 1911, by a small force from Hongkong consisting of 90 officers and men. This force was further augmented on January 5, 1912, by the dispatch of a second detachment from Hongkong consisting of 3 officers and 170 men of the Indian army with 4 tripod machine guns, and 2 officers and 28 men Royal Garrison Artillery with two 15 pr. Q.F. guns. Ten miles of wire to form an entanglement along the Shameen bank of the canal, and 10,000 sandbags to form cover for the defenders were sent with this force. This guard was found sufficient for the purpose for which it was intended,

namely to render an attack on the settlement by unorganized levies too hazardous to be attempted. When in March 1912 local conditions assumed a more tranquil appearance, the guard was reduced; on June 8, 1912, it was wholly withdrawn.

On June 21, 1912, a recurrence of disorder being apprehended, a force of 170 men of the Indian Army with 4 machine guns were again dispatched as before. On July 30 a further 50 men from the same regiment were sent to the Shameen in order to lighten the guard duty of the original detachment. Early in 1913 it was considered that conditions justified the withdrawal of the Shameen garrison, which was accordingly done on February 20.

In July 1913 the feeling throughout central and south-east China against Yüan Shih-k'ai broke out into active rebellion. Kwangtung declared its independence of the Central Government, and disturbances took place in Canton. Troops were asked for to protect the Shameen, and on August 4 200 Indian infantry and 4 machine guns were once more sent up from Hongkong. On August 8 a further 200 men were sent. There was no serious trouble, however, and on August 18 150 of the troops, and on August 29 the remainder, were withdrawn.

Surrounding Country

The northern point of the city lies on a cluster of hills which are covered with tombs. Outside the walls and about 500 yds. north-east of the five-storied Pagoda is Gough Fort. The hills here are outlying spurs of the Pok-wan Shan, White-cloud Mountain, the crest of which, about 5 miles north-north-east of the city, is 1,200 ft. high and commands a full view of the Delta country. The White-cloud Mountain is itself an offshoot of the Ta-yü-ling, the chief mountain range of Kwangtung. It is covered with monasteries.

Immediately beyond the east suburb is the east Parade Ground and north of it the Mint and the north Parade Ground. Across the railway beyond the eastern end of Tung-kwan is a hill and the temple called Tung-shan-miao.

On the west of Canton the country is low-lying, threaded

by water-ways, and liable to devastating floods, which break down the embankments and do enormous damage to crops and property. The distress consequent on these occurrences tends to increase the number of pirates and bandits which infest the province. The Yüeh-Han Railway runs through this district.

Across the Pearl River and facing Wongsha and Shameen is the island of Fati (Hua-ti) with its gardens, a place of growing importance possessing a glass factory and a shipyard, besides the terminus of the Canton–Samshui Railway.

Dutch Folly Island, a low sandy stretch in the Front Reach, was once the site of the Sea-Pearl (Hoi-chü) fort ; and across the river opposite Canton City is the island of Honam, which has a population of about 100,000. Like Fati, Honam is a pleasure resort with temples, gardens and a racecourse ; but it has very busy districts along the river reaches with brokers' shops, warehouses, matting factories, cement works, shipyards, wharves, and jetties.

Climate and Hygiene

The climate of Canton is always warm, usually hot and damp, and there is practically no winter. The hot and cool seasons correspond roughly with the monsoons. Summer extends from April to October, autumn from November to January, and spring from February to April. For details see pp. 14 and 15.

The prolonged heat is enervating for Europeans and great care is needed to preserve health. Localities on the river, such as Shameen, enjoy a moderate degree of coolness. But Europeans must carefully guard against both the sun's rays and chills, as fever, ague and sunstroke are induced by very slight exposure. Dysentery and intestinal diseases are common in summer and may be contracted by careless use of raw vegetables and fruits.

Though the sanitation of Canton is very primitive, judged by European standards, the city is, for China, comparatively well kept and by no means unhealthy. The police employ

gangs of coolies to clear the streets of garbage ; and, as a precaution against plague, boxes are placed at street corners for the reception of dead rats from the waterworks.

Canton, however, is not immune from the diseases which are common in Southern China, where bubonic plague is endemic and epidemic, cholera frequent in February and March, smallpox epidemic from January to May, while malaria, dysentery, measles, dengue and influenza are frequent visitants. Cases of leprosy occur and are dealt with at the Home for Lepers (Ma-fung-yüen) about a mile from the north-east corner of the city.

Schools, Hospitals, and Missions

The Cantonese have always prided themselves on their intellectual activity. Since the introduction of modern education, the old colleges have been converted into modern schools including the high schools, technical schools, and colleges. Among them are :

The Liang-kwang Tai-kok-tong, a college established by the Viceroy Chang Chih-tung and situated outside the north-west corner of the suburbs, beyond the railway.

The Higher Polytechnic Institute.

The Law School, in the north-west corner of the city.

The Military Medical School.

The Normal School.

The Foreign Language School.

The Mensuration School.

The Military Preparatory School.

The School for Sericulture.

Schools for teachers of Agriculture, Industry, and Commerce.

There are besides numerous grammar schools, middle schools, and common schools, and the missionary schools and colleges, of which the most important is the Canton Christian College situated at Hongkok, 6 miles down the river.

Numerous missionary societies both Protestant and Catholic are established in Canton, many of which have hospitals, dispensaries, and schools. The Wesleyan Methodist Church

Missionary Society has two hospitals. The Medical Missionary Society in China has a well-appointed hospital. The Tau-mei Hospital in Pou-tsin-kai is a Roman Catholic institution. There are also native hospitals of which the Pok-tsai-I-yüen on the river front east of West Creek is considered the best equipped; and there is a native hospital near the Wa-lam-tz in Sai-kwan.

Protestant Missions at Canton

American Bible Society.
American Board of Commissioners for Foreign Missions.
American Presbyterian Mission.
American Southern Baptist Mission.
Berlin Missionary Society.
British and Foreign Bible Society.
Christian College in China.
Church Missionary Society.
London Missionary Society.
Presbyterian Mission of New Zealand.
Scandinavian-American Christian Free Mission.
Seventh Day Adventist Mission.
United Brethren in Christ.
Wesleyan Missionary Society.

Roman Catholic Missions at Canton

The French Mission.
(The Cathedral is under its care.)
Réligeuses Missionaries de l'Immaculée Conception.
Sacred Heart College.

Police

According to a Maritime Customs Report of 1913 the Canton police force was 3,000 strong, organized under 11 districts and 19 sub-districts. There were two companies of mounted police, and also a force of water police which patrolled the river front in launches and had its head-quarters at the Dutch Folly. There were two police schools, one for officers and one for men, and a hospital.

All police were in uniform and armed. Since the revolution of 1911–12 great progress has been made in the equipment and discipline of the police force.

Fire Brigade

Numerous hand pumping engines on wheels are stationed at various points in the city and a fire brigade is semi-organized in districts. The personnel is drawn from the various inhabitants who are registered and receive a remuneration for each fire they attend.

The whole is under the authority of the police. Fire calls of various non-mechanical and non-electrical descriptions are utilized and the brigades are generally quick to turn out, but lack of fire training militates against their usefulness. The material is of course 'shoddy' and it is only under the best circumstances that a stream of 30 ft. high can be obtained. It is of importance to note that it is quite probable that half a dozen fires simultaneously started in well separated portions would defeat the efforts of the available fire force.

In addition to the ordinary water supply a separate series of mains exists for dealing with fires. The buildings in the city being largely of wood with the exception of the side and back walls, fires are easily started and only quenched with great difficulty. A fire once started seldom spares the whole street. Fires occur with greatest frequency in October, November, and the first half of December. Various causes are assigned such as the dryness of the season, and incendiarism on the part of insured owners of businesses liable to fail in the settling up of accounts which takes place at New Year. To cope with these fires a system of 4 in. street mains is laid down and these are fed by pumping stations along the river bank both on the Canton and Honam sides. As soon as a fire alarm is given the stations concerned get up steam (fires are permanently kept banked during the dry season) and deliver water to the mains. The largest engine is situated in the electric power house (see p. 558) and is always ready for instant use.

Trade

Canton is the oldest and until recent times the most important centre of foreign trade in China. But since the development of Hongkong and the opening of the northern ports, her position has greatly deteriorated. Moreover the increasing dimensions of ocean-going vessels tends to make her less and less accessible owing to the limited depth of the Pearl River approaches. She still retains, however, an immense junk and launch trade, besides a very considerable coasting trade with the various Chinese ports ; and being situated near the junction of the main rivers of southern China she is a distributing centre for the inland trade of Kwangtung, Kwangsi and parts of Yunnan, Kweichow, and Kiangsi. Besides which the fertile lands of the Delta in themselves are productive of no small volume of trade. The growth too of the railway systems which radiate from Canton cannot fail to enhance her commercial importance.

The Customs Returns in 1916 give the nett value of the trade of the port in Haikwan taels :

1913	112,285,888	Of which foreign imports amounted to	31,967,686
1914	105,296,323		35,193,416
1915	103,817,195		26,823,005
1916	109,081,638		26,793,720

The Shipping Returns give totals entered and cleared under General Regulations :

	Vessels.	*Tonnage.*		*Vessels.*	*Tonnage.*
1913	9,574	5,234,451	Of which the following were sailing ships	364	72,284
1914	10,853	5,333,831		450	91,419
1915	10,312	4,972,317		348	54,534
1916	9,998	4,738,099		412	69,842

Under Inland Steam Regulations :

	Vessels.	*Tonnage.*
1913 . . .	57,294	883,592
1914 . . .	60,625	952,216
1915 . . .	64,527	984,641
1916 . . .	50,689	691,025

In the former list roughly three-quarters of the tonnage has been British, and in the latter all but a fraction is Chinese.

The falling off in the shipping in general is due to shortage of tonnage caused by the war, and in the inland launch traffic to the local disturbances and consequent increase of piracy.

The chief articles of import are : opium, cotton yarn and textile goods, kerosene, flour, coal, printing paper, salted fish, printed cotton cloth, medicines, and dried cuttlefish.

The chief articles of exports are : raw silk, silk fabrics, rush and bamboo matting, glass bangles, tea, preserved ginger, cassia bark, earthenware, palm-leaf fans, fire-crackers, furniture, articles of sandalwood, marble, precious stones, ivory works, and fine paper. The volume of trade in various articles has naturally been affected by war conditions.

There are seventy-two guilds of trade (hui-kuan) in Canton.

Industries

The larger industries of Canton which employ modern machinery are :

The Canton Electric Supply Company, which supplies Canton, Fati, Honam, and the Shameen. The power station is on the bund near the Dutch Folly. The power consists of alternating current at 60 cycles delivered at 2,000 volts H.T. and 100 volts L.T. The city is divided into 17 sections, each having its own control on the switchboard. Power is derived from 5 three-cylinder and 3 four-cylinder Diesel oil engines, each of 200 h.p. There are also 4,200 h.p. sets of high speed steam engines supplied by 3 water-tube boilers. The system used is 'overhead'. Honam is supplied by cable running across the river from the western end of Dutch Folly, Fati by cable from Shameen. By the switch-board system in use any circuit may be connected to any engine. A contract was signed in 1918 for a large increase in plant, 2 American high-pressure, non-condensing turbo-alternators rated at 2,500 kw., three-phase, 60 cycles, 2,300 volts ; one American high-pressure, non-condensing turbo-generator, 350 kw., 125 volts, direct current, switchboards, pumps, and other accessories : also four 750 h.p. Babcock and Willcox boilers.

Canton waterworks, a prosperous concern with steadily

increasing area of delivery. Pressure is secured by a large tank erected in the western suburb at a height of 90 ft. above the general level of the city. The source of supply is from the North River, several miles above the city. Modern machinery, filterbeds, and pipes are used and an analysis of the water shows it to be of good quality.

Docks and shipbuilding yards.

Engineering shops.

The Soo-fong-wai, Kwangtung Brick and Cement Works, at Honammei on the S. side of Front Reach opposite the Canton–Kowloon Railway terminus. It is a government concern built at a cost of £120,000 and supplied with machinery by the German firm of Carlowitz and Co. It produced 122,000 casks of cement in the first six months of 1916. The limestone used is obtained from quarries near Kun-yêm-kok on the North River.

Paper factory, glass lamp-shade factory, and cotton-weaving factory.

There are besides numerous house industries in Canton such as the making of fans, embroidery, jewelled articles, ivory and sandalwood works, rattan works, gold and silverwork and enamels.

Industries in the neighbourhood include glass works, paper mills and the Canton Knitting Co. at Fati : the match factory at Saitsün on the Yüeh-Han Railway : numerous manufactories at Fatshan (q. v.) 10 miles E. of Canton and potteries at Shekwan near Fatshan : the government smokeless powder factory on the N. bank of the Pearl River, near Shekmoon : Canton Arsenal near Suiping station on the Yüeh-Han Railway : and in the suburb of Honam may be seen the preparation of tea in its various stages, preserving ginger, packing of rattans, cassia, &c.

Mint.—There is a large and well-equipped mint situated in the N. of the Tung-kwan district just outside the eastern walls of the city. It was opened in 1889 by the Viceroy Chang Chih-tung.

Press.—A number of native newspapers are published at Canton. In 1911 there were already as many as sixteen.

Supplies

The Canton markets are well stocked with provisions at moderate prices : beef, poultry, fish, fruit and vegetables are obtainable at all times, and in winter mutton and game in plenty. There are steam flour-mills and considerable stocks of grain.

There is usually a considerable supply of coal at Canton, chiefly Japanese and of inferior quality : for details and loading facilities, see p. 64.

The Standard Oil and Shell Transport Companies have wharves and oil tanks in the Back Reach, on the W. side.

But general supplies for shipping, such as oil, tinned provisions and water would be obtained at Hongkong.

Transport

See general note on p. 66.

Internal Communications

Roads and Streets.—The streets both in the city and the suburbs of Canton are impracticable for any but foot passengers or Sedan chairs. They are paved with granite flags which are very uneven and in wet weather are very slippery. The general width of the streets varies from 6 ft. to 25 ft., the average being about 12 ft. ; of this available space some 5 or 6 ft. is occupied by stalls placed outside the shops leaving a walking space of from 6 ft. to 4 ft. It is often found that when two chairs meet in a street, one will have to back into a shop to allow the other to pass. There are, however, three broad streets leading (1) from the West to the East Gate, (2) from the North Gate due south to the Kuai-têk Gate and (3) from the South Gate due north to the Treasurer's *Yamen* on the North side of the street leading from the west to the East Gate. No. (1) is called the *Wai-oi-kai*. No. (2) which crosses the Wai-oi-kai close to the Tartar General's Yamen receives two names on the north and south of the Wai-oi-kai respectively. The northern stretch is called the *Tai-pêk-chi-kai* (Direct street to the Main North Gate) and the southern

stretch is called the *Sz-pai-lau.* No. (3) is called the *Sheung-mun-ti-kai.* These streets are about 20 ft. wide, but paved with slabs as all the other streets. The main streets are divided into sections or *tün* and of these the Wai-oi-kai is divided into 8.

In the western suburbs there are 4 main streets. (1) The *Shêp-sam-hong* which leads into the new city and runs from west to east.

(2) The *Shêp-pat-pou* which runs parallel to the Shêp-sam-hong until ' headed ' off by the city wall, when it runs northward to the West Gate, separated by a row of houses from the moat.

(3) The *Kao-pou* or ' ninth ward ' a continuation of which runs westwards to Wong-sha Railway Station.

(4) A street joining the Kao-pou and running south to Shameen.

There are many other streets but the above are the most important.

From Shameen to Tai-sha-tau the terminus of the Canton-Kowloon Railway, between the southern suburbs and the river is a bund some 50 ft. broad. This is properly metalled and is suitable for rickshas and carriages, though few of the latter are used. Of the former there are in its $2\frac{1}{2}$ miles some 1,000 rickshas plying for hire. Where the road crosses the creeks which form the moats of the city substantial bridges have been built raised some 12 ft. above the general level to allow of boats passing underneath. Ramps lead up to these bridges. The road after passing the railway station turns north and leads to the Provincial Assembly building, $\frac{1}{4}$ mile outside the East Gate. A branch road runs to Tung-shan, the settlement allotted to the European Staff of the Chinese Government Section of the Canton-Kowloon Railway.

From the Provincial Assembly the road continues north, and after a $\frac{1}{4}$ mile a branch leads to the north-east parade ground, thence skirting the north of the city under the wall and continuing to Saitsün the second station of the Canton-Hankow Railway. The main road continues on 4 miles to

In-t'ong where are situated the artillery barracks and training ground of the regular army. All this roadway has a minimum breadth of 30 ft. and a good bed. The road to Saitsün where it crosses the rice fields is raised 3 ft. and rivetted with iron gabions. It is proposed to run electric trams on these roads.

It may be mentioned that in all the streets near the Governor-General's *Yamen*, iron gates have been placed and positions loopholed to cover the streets.

Post Offices.—The following countries have post offices in the Shameen, and undertake the delivery of local correspondence : Great Britain, France, Germany, Japan, China.

The French have also two branch post offices in Canton, one in the Wai-oi-kai, and one in the New City immediately below the Kuai-têk Gate, leading from the old city.

There are wireless telegraphic stations at Fati and Canton (public and official) and both the Marconi and Telefunken systems are used : see pp. 116–17.

Telephones.—A telephone system with about 1,200 subscribers has been established. It is under government control and during the disorders of 1911–13 was frequently closed to general use. Shameen is on this system, but intercommunication is only obtained through the head office situated just behind the Tartar General's *Yamen* in the city. All the Shameen lines, however, leave Shameen by one pole, and Shameen could be locally short-circuited if the need arose. There would then, however, be no switchboard and special regulations would be required for the use of the telephones to prevent confusion.

External Communications

External communications may be considered under two headings, Chinese and foreign. Under the former may be mentioned the China seas, waterways, railways, roads, the post and telegraph.

There is a regular steamboat service, day and night, to Hongkong, the distance about 90 miles (78½ nautical miles) being covered in 7 or 8 hours : daily service to Macao, a

journey of 6 hours : regular service up the West River to Wuchow, the time taken on the journey up stream varying from 25 to 30 hours, downstream from 22 to 25 hours. Other inland water communications extend up the North and East Rivers, and a network of waterways in the Delta communicates with numerous busy and populous districts. See also pp. 162–75.

By railway there is communication with Kowloon ; and, from Shekwaitong opposite Canton, with Fatshan and Samshui : while the Yüeh-Han Railway is open as far as Shiuchow about 140 miles.

Roads suitable for wheeled transport with the exception of those referred to on p. 115, do not at present exist. Villages are connected by paths, in places paved with granite slabs, which frequently follow a very winding course along the bunds used in irrigating the rice fields ; generally these are 3 ft. wide.

A proposal is on foot to build two new roads, primarily for military purposes. They are to run :

(1) From the West Gate to Saitsün, the second station on the Canton-Hankow Railway, about $2\frac{1}{2}$ miles from the Wongsha terminus.

(2) From Canton via Fayünshing to Yingtak.

In January 1913 some progress had been made on the construction of (1) which will ultimately join the road now being made to connect the East and West Gates of Canton.

The foreign post offices, British, French, German, and Japanese will forward letters to any port in China at which the nationality in question is postally represented, and communication throughout the whole interior is now possible by means of the Chinese Postal Service, which is under the control of the Maritime Customs. Canton Head Office is situated in Sai-kwan opposite the north-east corner of Shameen and there are numerous branch offices.

The Chinese Telegraph Administration connects with practically all district cities and towns of importance in the country. The office is near the river front in the centre of Nam-kwan.

Foreign.—As regards the external foreign communications

of Canton, connexion exists with all parts of the world via Hongkong.

When the Canton-Hankow Railway is completed, Europe will be reached by railway via Peking, Mukden, and the Trans-Siberian route in from 18 to 20 days.

All post and telegraph offices accept letters and telegrams respectively for all parts of the world.

Distances from Canton

		miles.	
To Fatshan	by water	11½	Route 46
Fatshan	,, rail	10	
Hongkong	,, water	90	
Kongmoon	by water (steamer route)	80	
Kongmoon	,, (launch route)	54	Route 52
Kowloon	by rail	111	
Lungmoonyün	by water	103	Route 36
Lupao	,,	39	,, 42
Macao	,,	88	
Sainam	,,	30¾	Route 46
Samkong S.	,,	22	,, 43
Samshui	by water (steamer route)	95½	
Samshui	,, (via Fatshan)	34	Route 46
Samshui	by rail	30·4	
Shekkok	by water and land	42½	,, 41
Sheklung	by water	40¾	,, 34
Sheklung	by rail	40	
Shiuchow	,,	139·29	,,
Shiuchow	by land and water	172	Routes 54, 56, 57
Tsengshinghsien	by water	45	Route 36
Tsingyün	by land	62½	,, 54
Tsungfa	by water	59	,, 37
Waichow	,,	95	,, 34
Whampoa	,,	11	,, 34
Wongshek	by land	87¼	,, 54
Wuchow	by water (steamer route)	229	
Yingtak	by land and water	110½	Routes 54, 56

CHANCHUEN

Approximate { Latitude, 23° N. / Longitude, 113° 13′ E.

Authorities : China, Maritime Customs Reports ; Ray, Geography of Kwongtung, 1916.

Chanchuen (Ch'ên-ts'un) is a large town on the Chanchuen Channel south of Canton. It lies in the centre of a great rice-growing district and is said to have a **population** of 100,000 ; but it is declining in importance. It has one of the principal native Customs stations of the Delta, dealing with a large junk trade from Swatow, Hongkong, Macao, Annam, Yeungkong, Chaochowfu, Kiungchow and Sunning.

Its numerous exports include medicines, matting, woven silk, wood, cement, bricks, tiles and pottery, tinned fruits and meats, salted meats, grain, oil, poultry and eggs. It is approached from Canton by a channel which leads from Blenheim Passage through Hamilton Creek (see p. 544), and is in communication by waterways with all the large delta towns.

It has a post office (second class) with telegraph.

Distances from Chanchuen

To Canton (Shameen)	by water	16 miles	Route 52
Kumchuk	,,	36½ ,,	Route 52

CHAOCHOWFU (see Plan)

Approximate { Latitude, 23° 50′ N. / Longitude, 116° 36′ E.

Authorities : China, Maritime Customs Reports ; Imperial Japanese Railways, Official Guide, vol. iv, 1915.

Chaochowfu (officially renamed Ch'ao-an Hsien under the Republic), the prefectural city of the district, stands at the head of the Han River delta on the right bank of the river about 30 miles by water above Swatow. It is the seat of

local administration and a prosperous centre of commerce with a **population** variously estimated from 100,000 to 400,000. It is nominally a Treaty Port, but all the foreign trade is centred in Swatow.

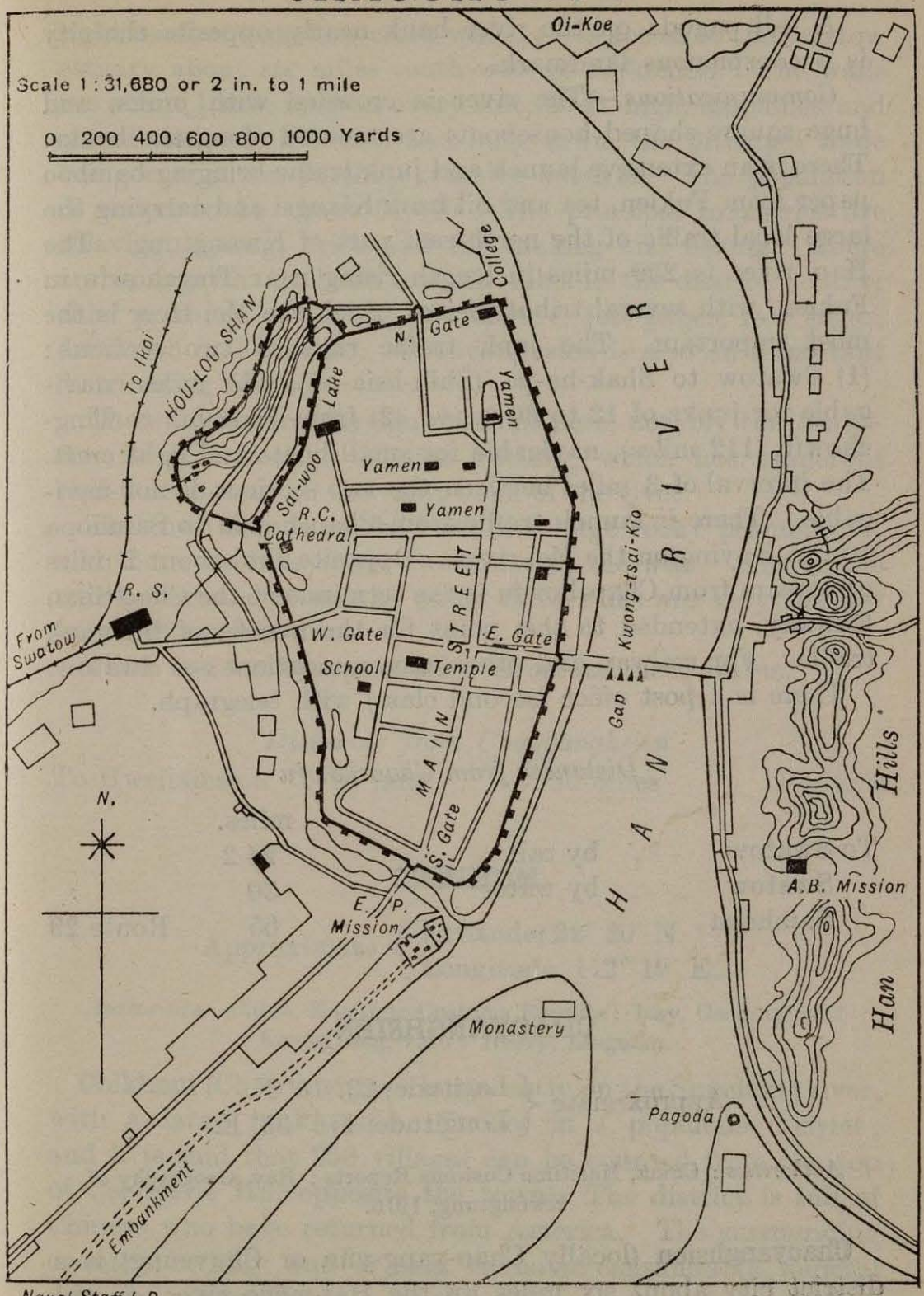
The *city* is well-built with wider streets than one expects in an inland Chinese town. It is of roughly oval trace, surrounded by walls which were built in the Sung dynasty. Chinese authorities give the dimensions of the walls as about 4 miles in circumference, 30 ft. high and 12 ft. wide : they also mention a moat 12 ft. wide ; but modern maps only show a creek running round the S. and W. sides and widening in places into small lakes. There are 4 gates, N., S., E., and W. At the north-west corner of the city is the Sai Wu, a lake beyond which rises the Hou-lou Shan, a picturesque hill with temples, which was included in the city by the new wall built in 1678.

The *railway station* is close to the Roman Catholic Cathedral, half a mile from the West Gate and connected with it by a road leading through the western suburb. There is an extensive suburb on the S. of the city along the river, at the N. end of which is the English Presbyterian Mission. This mission and the French Missions Étrangères have resident representatives. Along the E. of the river is a straggling suburb with few houses and shops, connected by a bridge of boats with the right bank. This now replaces the famous Kwong-tsai-k'iu, a bridge built in the Sung dynasty consisting of two sections of stonework joined by a pontoon, the whole measuring 1,909 ft. The last of the stonework was washed away in 1912. Behind the eastern suburb are the Han hills (Pit-ka Shan) rising to 300 ft., on the southern slopes of which is the American Baptist Mission.

Surrounding country.—Chaochowfu stands in an extensive plain in which sugar, oranges, vegetables, groundnuts, rice and cereals are grown. It is the head-quarters of the Hoklo people as Kaying is of the Hakkas.

Industries.—It has an electric lighting company and dye works, besides boat-building, paper-making, fan-making and shoe-making industries.

CHAOCHOWFU



Naval Staff I.D

A tall pagoda on the river bank nearly opposite the city is a conspicuous landmark.

Communications.—The river is crowded with junks, and huge square-shaped houseboats are moored along the banks. There is an extensive launch and junk traffic bringing bamboo paper from Fukien, tea and oil from Kiangsi and carrying the large local traffic of the north-east part of Kwangtung. The Han river is 250 miles in length rising near Tingchowfu in Fukien, with several tributaries of which the Mei river is the most important. The junk traffic runs in two sections: (1) Swatow to Shak-ha-pa (Shih-hsia-pa), 135 miles, navigable for junks of 12 to 30 tons: (2) from Fengshih to Tingchowfu (112 miles), navigable for small boats and light craft. The interval of 3 miles between the two sections is not navigable. There is launch traffic from Chaochowfu to Samhopa and to Kaying on the Mei river. Opposite Ikoi about 2 miles up stream from Chaochowfu is the terminus of the Chao-Shan Railway, extended to this point for the benefit of the junk traffic. For railway and other communications see Swatow.

There is a post office (second class) with telegraph.

Distances from Chaochowfu

		miles.	
To Swatow	by rail	24·2	
Swatow	by water	30	
Samhopa	,,	65	Route 29

CHAOYANGHSIEN

Approximate { Latitude, 23° 16′ N. / Longitude, 116° 35′ E.

Authorities: China, Maritime Customs Reports; Ray, Geography of Kwongtung, 1916.

Chaoyanghsien (locally Chao-yang-yün or Chuyeung) is a district city about six miles up the Hai-mêng river, on the

right bank of a shallow creek which gives access to the Swatow estuary about six miles south-west of Kakchioh. The walls are about ½ mile long on every side, 30 ft. high, loopholed and crenellated. It is a rich and busy town, the principal trade being carried on in the extensive suburbs. The **population** is stated to be about 30,000. The principal industries are weaving, dyeing, brick and tile making and fishing. There are as many as 28 brick and tile kilns in the district. Other chief products are cloth, pewterware, joss-paper, raw sugar, dried fish and tobacco. Chaoyanghsien is also an important distributing centre.

There are several foreign missions here, notably the American Baptist Foreign Mission Society, which has numerous well-built houses on the right bank of the river.

The town stands at the base of a large rocky promontory, and there are hills about two miles to the west. The creeks which surround it on the other three sides are very shallow with soft mud bottom.

There is a Chinese post office of second class status.

Distances from Chaoyanghsien

To Hweilaihsien	by land	30 miles	Route 4

CHIKHOM

Approximate { Latitude, 22° 20′ N. / Longitude, 112° 19′ E.

Authorities: China, Maritime Customs Reports; Ray, Geography of Kwongtung, 1916: Henry, Lingnam.

Chikhom (Ch'ih-k'an) is a busy centre on the Sunchong river, with a large junk trade. It lies in a populous district; and it is said that 350 villages can be counted from the top of Centipede Hill opposite the town. The district is full of Chinese who have returned from America. The surrounding country is hilly and is said to have considerable mineral deposits. Yanping is a neighbouring town of some impor-

tance, and above it is the head of navigation of the Sunchong river system.

The Sunchong river gives communication with the Delta and the sea.

There is a post office of the second class.

Distances from Chikhom

		miles.	
To Yanping	by water	22	Route 53
Sunchong	,,	4	Route 53
Kongmoon	,,	43	Route 53

CHONGLOK

Approximate { Latitude, 24° 2′ N. / Longitude, 115° 40′ E.

Authorities: Military Reports.

Chonglok (Ch'ang-lo Hsien) is a small district city of some 6,000 inhabitants on a tributary of the Mei Kiang, 35 miles south-west of Kaying. It stands in a small rice plain half a mile from the river on a creek about 20 yds. broad. There are high hills to the N. and W.; but the city lies low and is usually flooded for about two months in the year. The river is of considerable breadth but very shallow and only navigable by open sampans in the low water season. It is crossed here by a trestle bridge of 23 spans in poor repair, and there is a similar bridge half a mile down the river. These bridges will carry loaded coolies.

There is a postal agency here.

Distances from Chonglok

		miles.	
To Kiling	by water	17½	Route 24
Hohow	,,	22¼	,, 24

DOSING

Approximate { Latitude, 23° 18′ N. / Longitude, 111° 36′ E.

Authorities: China Sea Pilot; Maritime Customs Reports.

Dosing (Tu-ch'êng) on right bank of the West River about 17 miles above Takhing is one of the landing stages on the West River opened in 1904. It has a population of about 3,000 and a considerable trade in rice, ground-nut oil and cake. It has a second-class post office.

Distances from Dosing

		miles.	
To Takhing	by water	17¼	Route 48
Samshui	,,	104	,, 48
Wuchow	,,	29½	,, 48

FACHOW

Latitude, 21° 41′ 35″ } by computation from points ob-
Longitude, 110° 32′ 03″ } served with theodolite and watch.

Authorities: Lieuts. R. M. Crosse, G. S. and C. C. Chambers, R.G.A.

Fachow (Hua-chou) lies some 500 yds. back from the right bank of the Fau-shan-shui or Kochow river and to the W. of it in the midst of a broad plain with isolated hills. Its general shape is oblong rectangular and the W. wall is built on a hill 150 ft. high. The walls which are in a good state of preservation are 30 ft. high and similar to those of Shekshing. There are 4 gates, the east and west and 2 south gates, all protected by bastions. Within the walls it is only moderately built over. On the S. and E. are extensive suburbs in which the bulk of the trade is carried on. The eastern suburbs extend from the wall to the river. At this point the river, though only carrying two feet in the low water season, rises to a depth of nearly 6 ft. in the rainy season and is about 300 yds. wide. It is crossed by 2 ferries, each of 5 boats, each boat carrying

30 men in marching order. The extent of the suburbs on the N. is curtailed by a tributary, 200 yds. broad which flows into the main river from the W. at this point.

Surrounding country.—The country through which the river flows is flat, and produces sweet potatoes and ground-nuts. Occasional low hills are found at a distance of about 4 miles from the city.

Supplies.—The usual supplies are to be found, with the addition of flour of which some 20 bags should be obtainable in the city.

Transport.—50 to 60 boats of a capacity of 2 tons each, capable of carrying 12 men, are to be found at Fachow; but they draw about 2 ft. and cannot be easily used in the very dry season. The boats normally ply between Kochow, Fachow, and Muiluk, the former 2 days distant and the latter 1 day distant by river.

Communications.—The river is most used for communication except in the very dry weather. Practically all the year round boats go from Fachow to Muiluk. Except for a very local use of farm carts, coolies are the usual form of land transport.

There is a postal agency with telegraph.

Distances from Fachow

		miles.	
To Kochow	by land	26	Route 75
Shekshing	,,	25	,, 75
Limchowfu	,,	107	,, 75
Suikai	,,	31	,, 76

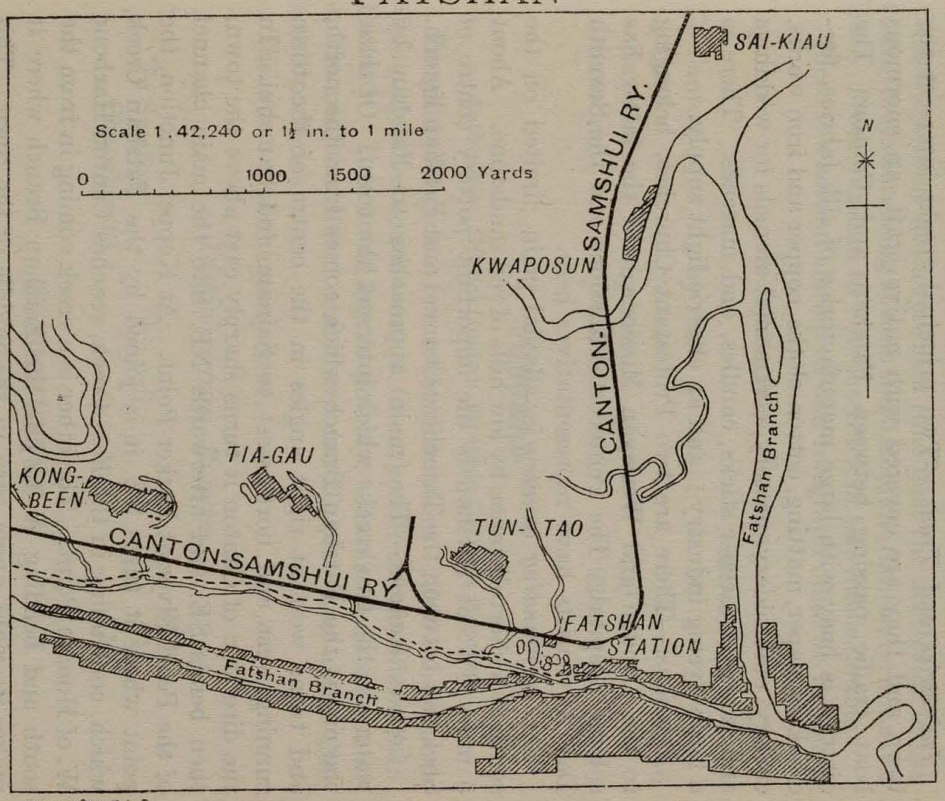
FATSHAN (see Plan)

Approximate { Latitude, 23° 2′ N. / Longitude, 113° 6′ N.

Authorities: Maritime Customs Report; Ray, Geography of Kwongtung; Henry, Lingnam; China Sea Pilot.

Fatshan (Fo-shan) 'the city of bankers', a great industrial centre of Kwangtung, is a large unfortified town about 10

FATSHAN



Naval Staff I.D

miles SW. of Canton, stretched out along the waterways which serve it. It is said to have a **population** of 500,000, and to extend for twelve miles.

Industries and Trade.—Two principal creeks intersect the town and they are covered with native craft, an enormous boat traffic passing between Fatshan and Canton. The district is busy with large manufactories of silk fabrics, fire-crackers, paper, matting, cotton-cloths, copper and iron works, cutlery, embroidery, pottery, ceremonial utensils for weddings and funerals, incense sticks, candles, and matches. There is a large dyeing industry ; and an electric light supply.

Missions.—There are two Protestant Churches, belonging to the London and Wesleyan Missions, and the latter has a large hospital. The Pentecostal Missions and the Seventh Day Adventists have representatives here.

The *surrounding country* is alluvial plain, limited on the south at a short distance by low hills of red sandstone. About 5 miles SW. of Fatshan is the important pottery centre of Shekwan between the Tamchow Channel and Fatshan branch.

Communications.—The main approaches to Fatshan by water are the two creeks which intersect the town. Of these the one is the Fatshan Branch which comes from the north, and turns west at right angles in the centre of the town running west and north-west to Sainam and Samshui. In the direction of Canton it turns sharply east above the town, then bends SE. and afterwards NE. into the main channel of the Pearl River at Parker Point. At Keppel Junction, the point where it turns SE. it is joined by the Fatshan Creek which, continuing in the Fati Creek, reaches Canton Harbour W. of Honam Point. The other is a creek coming in from the south and bending W. to join the Fatshan Branch where it makes its right angle turn in the middle of the town. This creek trends SE. past Tuhkao into the Money penny Creek which joins the Fatshan Branch W. of Hyacinth Island and so connects with the Pearl River at Parker Point. The Fatshan Branch is said not to be navigable for vessels drawing more than 4 ft.

Fatshan is thus linked by its creeks with the main waterways of the Delta and communicates by junk and launch with all the principal towns of this district. It is also served by the *Canton-Samshui Railway* which runs past the north side of the town, its station being at mile 10·25 from the Canton terminus at Fati. From Fatshan to Fati the track of this line is double.

There is a second class post and telegraph office at Fatshan.

Distances from Fatshan

		miles.	
To Canton	by rail	10	
Canton	by water	11½	Route 46
Samshui	by rail	20	
Samshui	by water	22½	,, 46

FUNGKAI

Authorities: Official Guide; Maritime Customs Reports.

Fungkai (Fêng-ch'i) is a town with about 12,000 inhabitants about 2½ miles south-west of Chaochowfu on the Chao-Shan Railway. It is noted for its pottery. Kaolin beds are found in the neighbourhood and there are 20 kilns and about 200 small potteries.

There is a postal agency here.

Distances from Fungkai

		miles.
To Swatow	by rail	21½
Chaochowfu	,,	2½

FUNGCHÜNYÜN

Approximate { Latitude, 23° 26′ N.
Longitude, 111° 35′ E.

Authorities: China Sea Pilot; Maritime Customs Reports.

Fungchünyün (Fêng-ch'üan Hsien) is a small walled city on the left bank of the West River about 13 miles below

Wuchow. It is roughly circular in shape with walls, which were renewed about 1450, extending about 1,000 yds. The principal landing place is below the main gate on the west side ; and a small tributary of the river flows past the north side of the town. East and north-east are hills with temples and a conspicuous pagoda. There is a postal agency here.

Distances from Fungchünyün

		miles.	
To Takhing	by water	32¼	Route 48
Samshui	,,	119	,, 48

HEUNGCHOW

Approximate { Latitude, 22° 17′ N. / Longitude, 113° 35′ E.

Authorities : Military Report ; Maritime Customs Reports ; China Sea Pilot.

Heungchow (Hsiang-chou) is situated south of the centre of Heungchow Bay on the east coast of the island of Heung-shan and about 7½ miles north of Macao. It is a new town designed by a company of rich Chinese returned from abroad and intended to be a commercial rival to Macao. The site, comprising the villages of Wan-chai, Wan-chai-sha, Ye-li-wan, and Pa-tzu-shek, was opened as a commercial port by the Viceroy of Canton in 1909 and declared duty free in May 1911. The site of the new town has been laid out, a number of houses built and two large wooden jetties erected ; but at present there is very little traffic inwards or outwards, though the promoters of the scheme are convinced that the port has a great future before it.

Heungchow Bay is about 3 miles wide and faces nearly east : it is exceedingly shallow and nothing but native craft, river gunboats, or vessels drawing less than 3½ ft. can come within a mile or so of the shore. Yeh-lee island, about ¾ mile long and ½ mile wide, lies in the south part of the bay leaving an

entrance of some 600 yds. on the south and a gap of about 2 miles on the north. The approaches are encumbered by fishing stakes and scoop-nets, and the sea beyond is studded with small islands and rocks. There are large oyster beds in the bay from which the inhabitants gain a living.

The site of the town which is not more than 20 ft. above high-water mark, lies within an arc of treeless hills, 50 to 300 ft. high, enclosing an area 3 miles long by 1 mile wide. These hills which run close down to the shore at each arm of the bay, are of red disintegrated granite covered with coarse grass, with here and there black granite boulders. The beach is of shingle. The country beyond the hills is not very thickly populated ; and rice and taro are the chief crops. A certain amount of afforestation has been done by local Chinese.

A good carriage-road has been built to Tsinshan, north of Macao ; other tracks are narrow paths, 9 ins. to 2 ft. wide, along the paddy bunds.

There is a postal agency.

HOIFUNG

Approximate { Latitude, 22° 58′ N.
Longitude, 115° 19′ 30″ E.

Authority : Military Report.

Hoifung (Hai-fêng Hsien) is the capital of the district of Hoifung or Hoi-Tung as printed in many maps. The city is enclosed by a wall some 30 ft. high measuring about ¼ mile each way.

The walled town is devoid of interest ; there are only a few *yamêns* and practically no business. The suburbs on the south and east have a fairly large trade in the usual Chinese commodities ; see Swabue. A large carrying trade in dry fish is done between this town and Swabue and Lukfung. The English Presbyterian Mission has a small mission room here.

Surrounding Country.—The country to the south and east

is flat. At a distance of 4 or 5 miles to the north and west are hills ; those on the NW. rise to over 4,000 ft.

Communications.—The town can be approached by water either from Swabue or Lukfung, but it is a long and tedious journey to both of these places.

There is a postal agency with telegraph.

Distances from Hoifung

		miles.	
To Lukfung	by land	21¼	Route 8
Swabue	,,	15	,, 9
Samtohü	,,	32½	,, 16
Hopo	,,	51	,, 32

HOIHOW AND KIUNGCHOW (see Plan)

		Lat.	Long.
Hoihow	Approximate	20° 0′ N.	110° 19′ E.
Kiungchow	,,	19° 57′ N.	110° 18′ E.

Authorities : Military Report ; Maritime Customs Reports ; Madrolle, China du Sud ; Henry, Lingnam ; China Sea Pilot

Kiungchow (Chiung-chou Fu or Ch'ing-tao) is the prefectural city of the island of Hainan. It is connected by two creeks with Hoihow its sea-port which is situated on the delta of the Po-ch'êng river and is 3 miles distant. Kiungchow was opened to foreign trade by the treaty of Tientsin 1858 but the Maritime Customs was not installed till 1876.

City and Harbour.—The city of Kiungchow is of rectangular oblong shape. Its walls rebuilt in the early Ming period are about 2½ miles in perimeter, 30 ft. high, pierced by four gates, and surrounded by a moat 50 ft. wide. They are, however, neglected and overgrown with vegetation. The enclosure is not thickly built over but has many open spaces and ponds. The streets are narrow and paved with rough flat stones, with a deep wheelbarrow track down the centre. Outside the west

wall is a busy mart communicating by creek with Hoihow. About 1 mile E. of the city is the small port of Bak-siang on the Po-ch'êng river where goods coming down from the interior are unloaded.

Hoihow is built on a southern arm of the Po-ch'êng River Delta. The walled town is a lozenge-shaped enclosure from which extensive and straggling suburbs spread on the east and west and along the creek on the north, with one principal street running E. and W.

Though its geographical position as the chief port in the Hainan Straits is favourable, its commercial importance is greatly reduced by the difficulties of approach. A sandbank spreading from Baksha Point on the N. of the delta and running SW., together with the silt of the Po-ch'êng River forms a bar across the entrance to Hoihow creek on which there is barely a foot of water at low tide springs. The ship anchorage is outside the bar, about 2 miles from the creek and 3 miles from Hoihow. It is exposed from the north and liable to be swept by typhoons. The entrance to the creek is between two whitewashed forts. Junks can enter at high tide; but at low tide the creek is practically inaccessible, and on account of the silting it is dry at low water springs on left bank at and above the Customs House in Tehshengshan.

The shore on both sides of the channel is broken up into a succession of islands by various creeks leading into the river. To the SW. are creeks, salt pans, and paddy fields cutting off the foreign houses from the ridges which, rising 40 to 50 ft. all round, are utilized as positions for forts. Near the river between Kiungchow and Hoihow is a pagoda, 150 ft. high.

Foreign Residences.—No foreign settlement has as yet been formed at Hoihow, and most of the houses occupied by Europeans are converted Chinese buildings. There are, however, a certain number of European buildings such as the American Presbyterian Mission Hospital and doctor's residence, the Customs, the French post office, the French School for Chinese, the French hospital, and doctor's residence. The British Consulate is situated SW. of the hospital, the French

on the N. side of the creek facing Hoihow, and the German (a new and modern building) in the west of the W. suburb.

The **population** is variously estimated and may be placed at about 30,000 for Hoihow and 50,000 for Kiungchow. The number of foreigners in the island in 1914 was 107, of whom 24 were British.

Missions.—Two Protestant missionary societies—the American Presbyterian and the Independent Missions—are represented in the district. The former has two schools at Kiungchow—the Paxton Training School just outside Kiungchow city and the Pitkin Memorial School for girls near it. The French Catholic Mission is also active there and there is a French Orphanage and girls' school.

The *dialect* spoken by the Hainanese is akin to those of Amoy and southern Formosa.

Hoihow is regarded as relatively healthy but the water supply is not good.

Trade and Industry.—Agriculture and cattle-rearing are the chief occupations on the island, and the principal products are rice, sugar, ground-nuts, sesamum seed, betel-nuts, silk (from wild and cultivated silkworms), coco-nuts, pineapples, galangal, &c. The cultivation of cotton, coffee, hemp, and rubber were introduced in 1910. Exports which go chiefly to Hongkong consist of pigs, poultry, bullocks, eggs, sugar, hemp, galangal, and cow-hides.

Hoihow has an electric lighting company and there is an ice factory at Kiungchow. The industries of the district include tanning, rope-making, shoe-making, pottery and glass-making, and tinning fruits. There are salt manufactures round the coast.

The Standard Oil and Asiatic Petroleum companies have establishments at Hoihow.

A considerable number of emigrants go to Singapore and Bangkok.

There is a branch of the Bank of China at Hoihow. The currency is chiefly in dollars—Mexican, Singapore, Hongkong, and Kwangtung dollars, the Japanese yen, and the Indo-

Chinese piastre. The subsidiary coins, the 1-cent, 12-cent copper coins, &c. are at a discount.

The *shipping* trade, which is not large, was formerly in the hands largely of German and French companies. The former have now been replaced to a great extent by British shipping. There is considerable junk traffic with Chinese coast towns.

Shipping returns for 1915 : entered and cleared—steamers, 796 (719,142 tons), about five-eighths British : junks, 7,111 (2,019,180 tons), besides a few sailing under Inland Steam Navigation rules.

Supplies.—Supplies are fairly plentiful and prices moderate, but notice should be given beforehand. Water is brought off in water boats. Supplies of about 200–300 tons of coal are available and can be shipped from lighters.

Transport.—Transport consists of boats, carriers, wheelbarrows, carts, and buffaloes. A carriage company with about a dozen horse-carriages plies on the road between Hoihow and Kiungchow.

Administration.—The chief official of the island, formerly a Tao-t'ai, resides at Kiungchow. A Chamber of Commerce was established in 1907, and a branch of the Self-Government Society was established in 1910. A Judicial Court was erected at Kiungchow in 1911. Land and water police were organized before the revolution but many changes have been made since. The establishment of a separate provincial government for Hainan has been under consideration by the Republic, and it is possible that Kachek, Lingshuihsien, and Aichow may be opened as treaty ports

Communications.—There is a carriage-road between Hoihow and Kiungchow, and roads of the usual Chinese type—mostly bad—to various parts of the island. The Po-ch'êng River is navigable for light-draught boats for about 60 miles from the mouth. Craft of $2\frac{1}{2}$ ft. draught can proceed up to Kimkang, a market town of about 2,000 inhabitants, about 44 miles from Kiungchow and the usual terminus of river traffic.

The French ships of Marty & Co. call fortnightly on the run from Haiphong to Hongkong. Messrs. Butterfield &

Swire, and Jardine, Matheson & Co. have started running ships from Hongkong to Haiphong to replace the German lines ; and the Japanese Osaka–Shosen Kaisha put two ships on the run in 1915. The China–Siam Steamship Company with chartered Norwegian and Swedish ships is engaged in the emigration trade to Bangkok and Singapore.

Under the Siems-Carey scheme it is proposed to build a railway connecting Hoihow with Lokwei on the east coast.

The Chinese Post Office has a first-class office at Kiungchow and a second-class office at Hoihow. At the latter place are also British, French, and German post offices. Telegraph offices at both towns are connected with the mainland by a cable from Jinme Point about 14¾ miles west of Hoihow to Palm Point, a little W. of Hai-an. A short-range wireless installation formerly connected Hoihow with Süwenyun on the mainland. It was erected in 1907, but its working was unsatisfactory owing to neglect at the mainland station, and it has been dismantled.

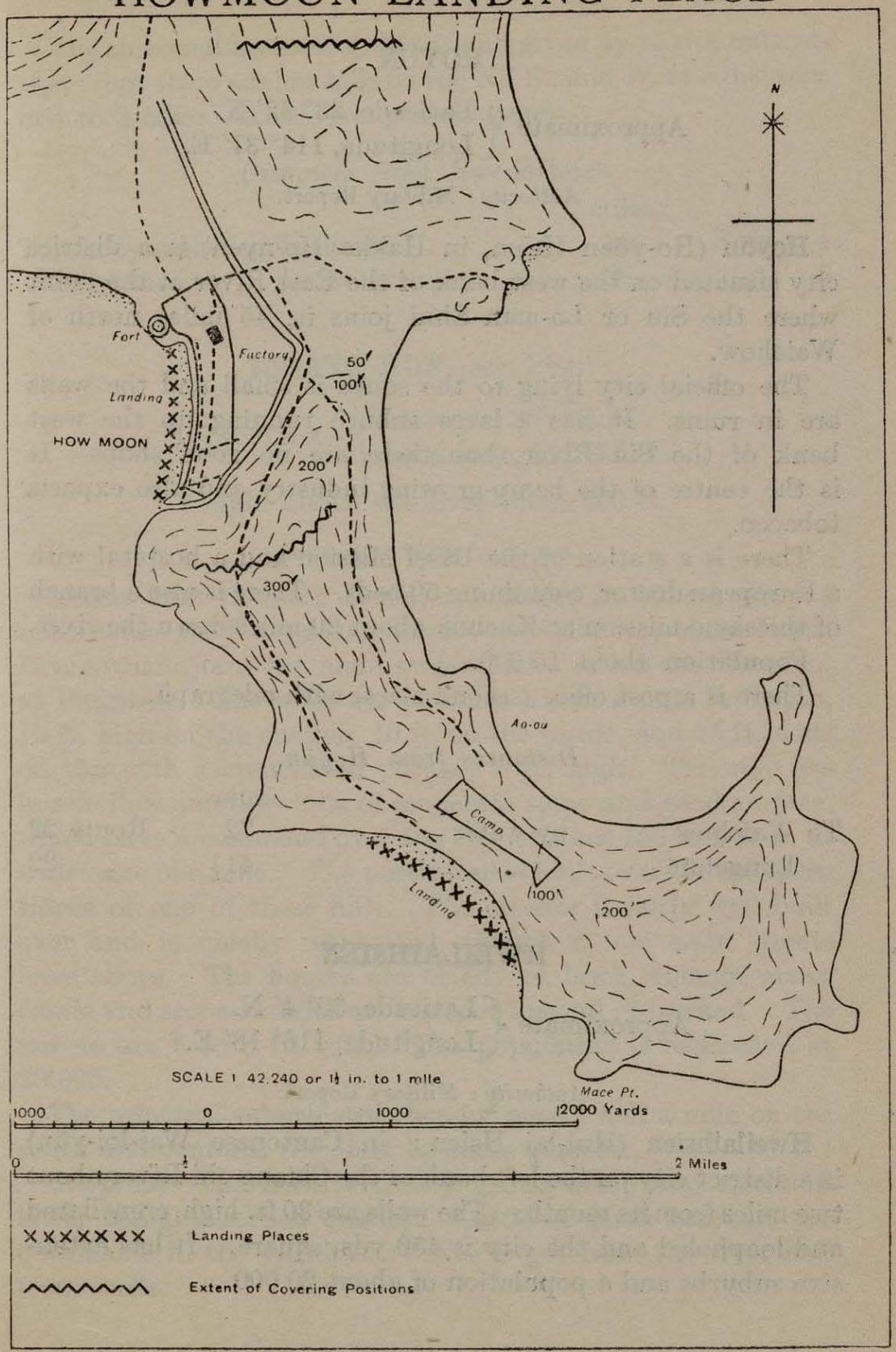
Distances from Hoihow

		miles.	
To Kiungchow	by road	3	Route A
Tingan	,,	22	,, A
Tingan	by river and road	29	,, M
Kachek	via Tingan	62	Routes A, B
Kachek	via Mencheong	99	Route C
Limko	by road	53	,, K
Ch'ang-hua	,,	145	Routes K, T
Vang-chiu	by road and river	107	,, A, B, Q
Aichow	via Ch'ang-hua	238	,, K, T, S
Aichow	via Vang-chiu	221	,, A, B, Q, R

Distances from Kiungchow

		miles.	
To Kimkang	by road	42	Route F
Tanchow	,,	89	Routes F, G
Ling-mên	by river and road	69	Route N
Lingshuihsien	via Ling-mên	165	Routes N, P

HOWMOON LANDING PLACE



Naval Staff I.D

HOYÜN

Approximate { Latitude, 23° 42′ N.
Longitude, 114° 31′ E.

Authority : Military Report.

Hoyün (Ho-yüan Hsien, in Hakka Ho-nyen) is a district city situated on the west bank of the East River at the point where the Siu or Lo-man Shui joins it, 45 miles north of Waichow.

The official city lying to the south is small and the walls are in ruins. It has a large suburb running up the west bank of the Siu River, but there are no good shops. It is the centre of the hemp-growing industry and also exports tobacco.

There is a station of the Basel Mission and a hospital with a European doctor, containing 50 beds. There is also a branch of the same mission at Kuchuk about 20 miles down the river.

Population about 15,000.

There is a post office (second class) with telegraph.

Distances from Hoyün

		miles.	
To Waichow	by water	72	Route 22
Lungchün	,,	41½	,, 22

HWEILAIHSIEN

Approximate { Latitude, 30° 4′ N.
Longitude, 116° 18′ E.

Authority : Military Report.

Hweilaihsien (Hui-lai Hsien : in Cantonese Wai-loi-yün) is a district city on the left bank of the Chiang-chi River about two miles from its mouth. The walls are 30 ft. high, crenellated and loopholed and the city is 450 yds. square. It has extensive suburbs and a population of about 20,000.

The surrounding country is flat and given up to rice cultivation ; but there are low hills on the N., E., and W. at a distance of 1 to 2 miles. There is a postal agency.

Distances from Hweilaihsien

		miles.	
To Chaoyanghsien	by land	30	Route 4
Kweitam	by water	29	,, 5

ICHANG HUN (see Plan)

Approximate { Latitude, 25° 27′ N. / Longitude, 112° 28′ E.

Height above sea-level about 600 ft.

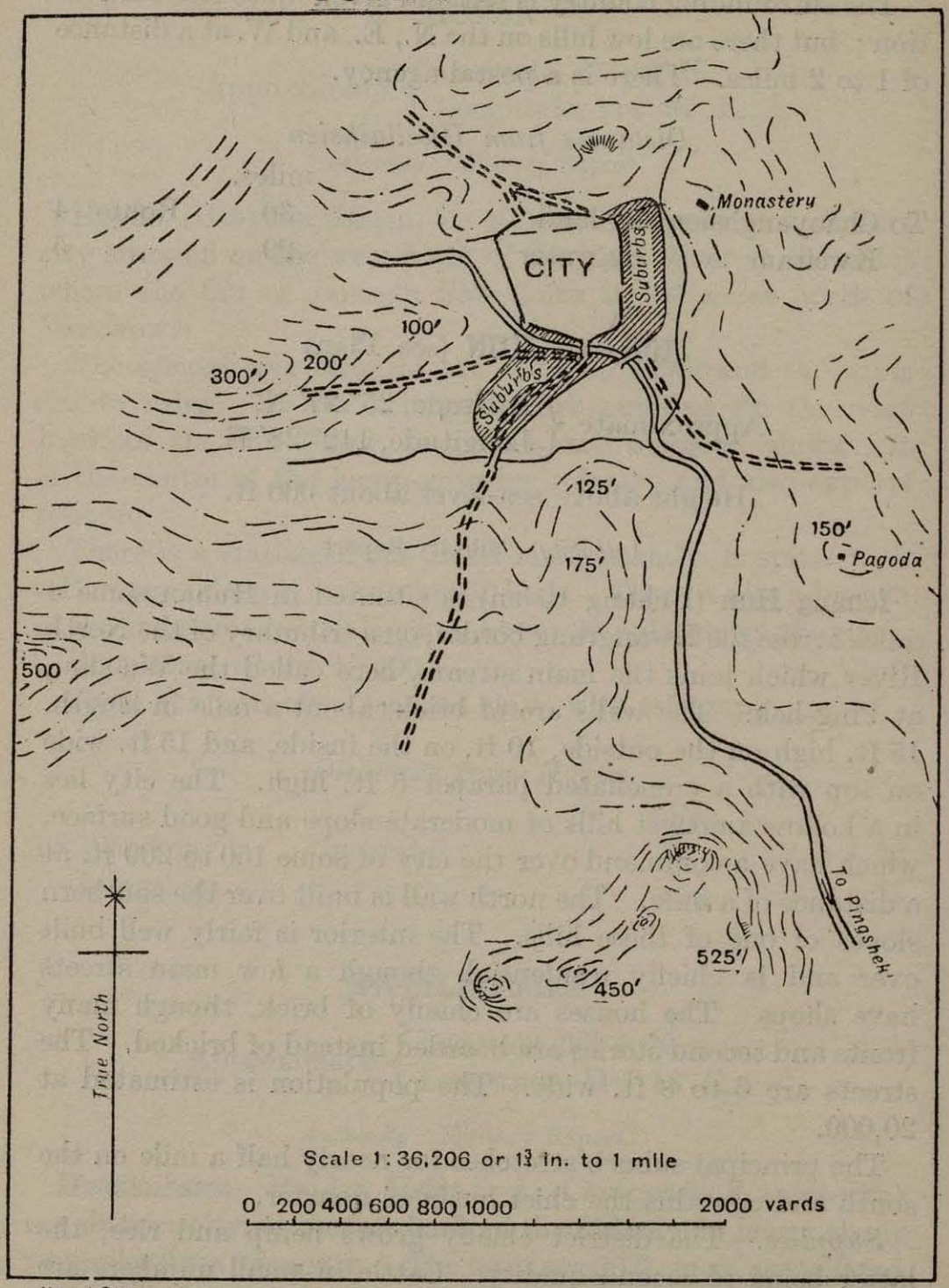
Authority : Military Report.

Ichang Hun (I-chang Hsien) is situated in Hunan some 4 miles across the Kwangtung border, on a tributary of the North River which joins the main stream, here called the Wu-shui, at Pingshek. The walls are of brick, about a mile in length, 15 ft. high on the outside, 10 ft. on the inside, and 15 ft. wide on top with a crenellated parapet 5 ft. high. The city lies in a hollow amongst hills of moderate slope and good surface, which have a command over the city of some 150 to 200 ft. at a distance of a mile. The north wall is built over the southern slopes of one of these hills. The interior is fairly well built over and is chiefly residential, though a few main streets have shops. The houses are chiefly of brick, though many fronts and second stories are boarded instead of bricked. The streets are 6 to 8 ft. wide. The population is estimated at 20,000.

The principal suburb stretches for nearly half a mile on the south and contains the chief business quarter.

Supplies.—The district chiefly grows hemp and rice, the latter being of second quality. Cattle in small numbers are obtainable in the vicinity. Water is got from the river and from wells.

ICHANG HUN



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Transport.—The type of boat available for river transport during the wet months is of the following dimensions : length 36 ft., breadth 5 ft., draught 6 in., free-board 1 ft. 6 in., capacity ¼ ton of cargo and 10 men at most. Some 30 of them are available at Ichang. Coolies could be hired up to the number of 200, carrying about 100 lb. for 25 miles a day at a daily cost of 80 cents. per man.

Communications.—There is water communication by shallow-draught boats with Pingshek and the North River, but navigation up stream is difficult and in places dangerous. The track leading to Pingshek across difficult country is the main land route between Hunan and Kwangtung. The Yüeh-Han railway is located to pass Ichang. There is a post office of second-class status.

Distances from Ichang Hun

		miles.	
To Pingshek	by land	12	Route 63
Lokchong	by land and water	52	Routes 62, 63
Shiuchow	,,	87	,, 61, 62, 63

KACHEK

Approximate { Latitude, 19° 17′ N. / Longitude, 110° 28′ E.

Authorities : Maritime Customs Reports ; Pearson's Report ; Henry, Lingnam.

Kachek (Chia-chi), the most important town in Hainan after Kiungchow and Hoihow, stands on the left bank of the Kachek River about 10 miles from its mouth. It is a busy market with a permanent **population** of about 2,000 which swells to some 40,000 on market days.

The American Presbyterian Mission has a station and a hospital here. Kachek is reputed to be the healthiest place on the island. It is a centre of sugar, coco-nut, and cattle industries, and an entrepôt for goods from the Loi district.

The Kachek River is navigable for shallow-draught boats

as far as Tin-fou and there is considerable junk traffic at its port of Bakia. Native roads run to Hoihow, Mencheong and southward along the coast. Under the Siems-Carey scheme it is proposed to build a railway from Hoihow to Lokwei which would pass Kachek. There is a post office of second-class status.

Distances from Kachek

		miles.	
To Tingan	by land	40	Route B
Nodoa	,,	90	,, D
Kimkang	,,	60	,, D.1
Aichow	,,	158	Routes Q & R
Hoihow	,,	62	,, A, B

KAYING (see Plan)

Approximate { Latitude, 24° 17′ N. / Longitude, 116° 4′ E.

Authority : Military Report.

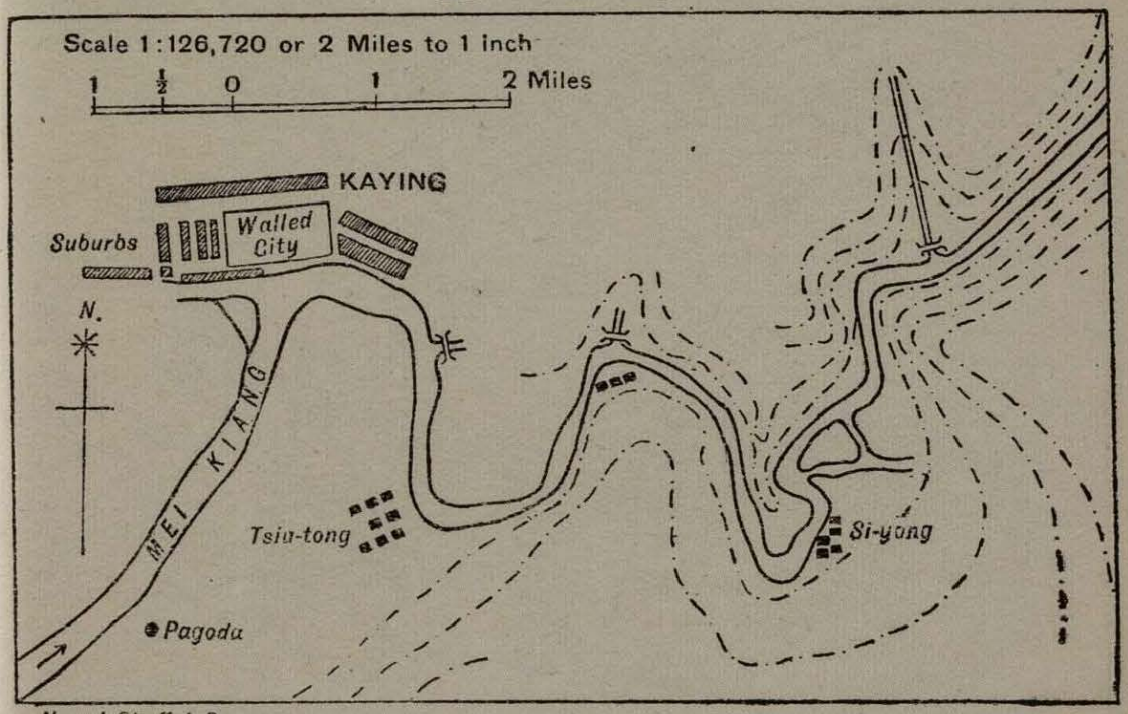
Kaying (Chia-ying Chou : Ka-yin-chu in Hakka : Ka-ying-chao in Cantonese) is situated on the left bank of the Mei-kiang, 75 miles NNW. of Swatow. It is a large and flourishing town with a **population** of some 100,000, standing in an extensive rice plain on a bend of the river. The walls are $2\frac{1}{4}$ miles long and 30 ft. high, with a moat 24 ft. wide ; and the official city is well kept. There is a large and busy street between the city and the river in which are many good shops where European commodities can be bought. There are large suburbs in the east of the city. Coloured cotton cloth and clog making are important industries, and there are many tin-smiths. It is the head-quarters of the Hakkas. Launches run from here to Chaochowfu. The coal mining in the Kaying district received a much-needed impetus from the high prices caused by the European War.

There is a post office (second class) with telegraph.

Distances from Kaying

		miles.	
To Samhopa	by water	38¼	Route 25
Hohow	,,	44	,, 25
Yünmenling (Kiangsi)	by land	75	,, 26

KAYING



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KITCHIOH (see Plan)

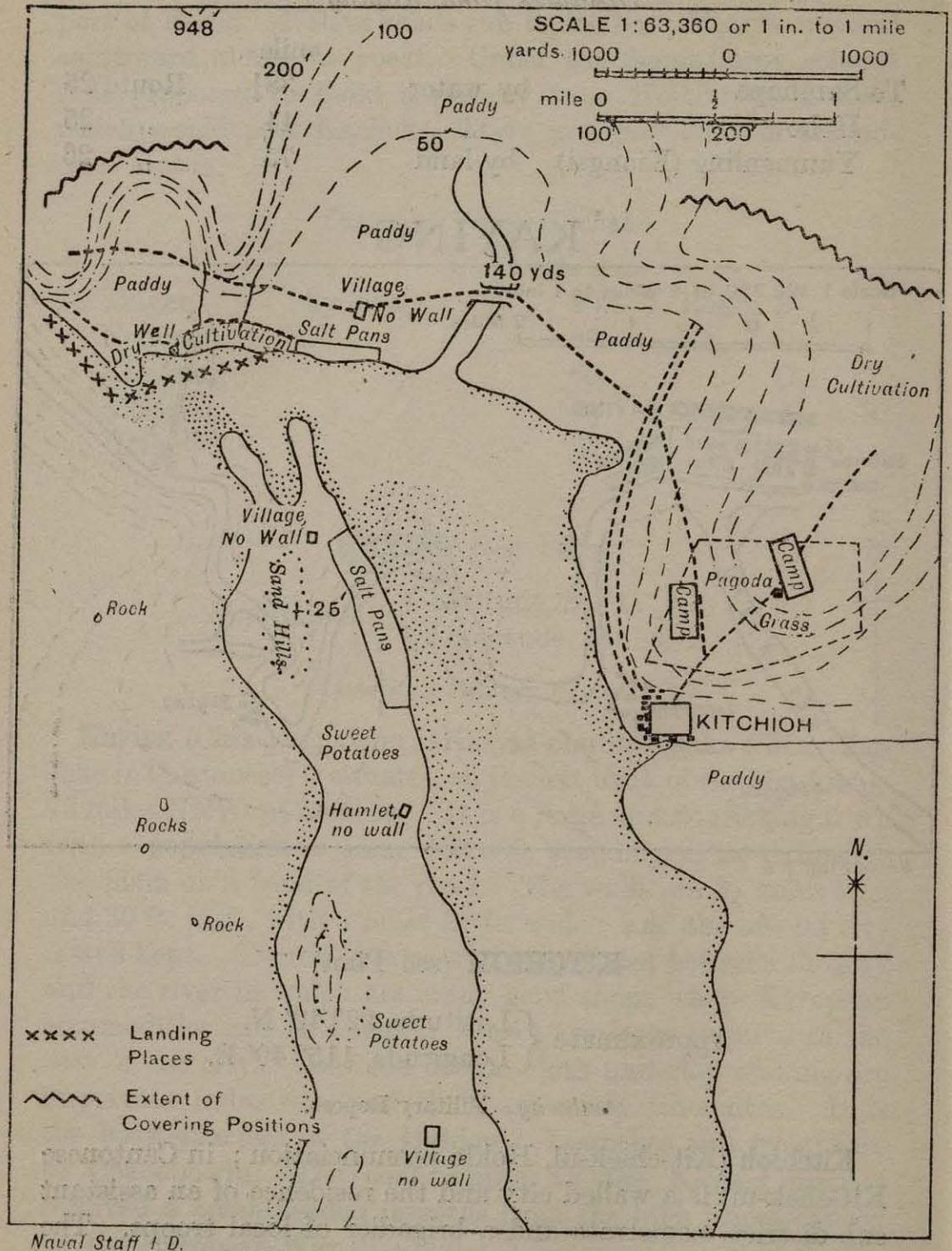
Approximate { Latitude, 22° 49′ N.
Longitude, 115° 49′ E.

Authority: Military Report.

Kitchioh (Kit-chiek-ui, Hoklo pronunciation; in Cantonese Kit-shek-ui) is a walled city and the residence of an assistant sub-district magistrate and a brigadier of local troops. The city is enclosed by a wall 20 ft. high and is 300 yds. square.

It is situated on an inlet with a very narrow entrance, formed

KITCHIOH LANDING PLACE



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by a tongue of land running north, on the east side of Hai Che Chin Bay.

It does a large trade in fish and salt, and the usual Chinese articles of commerce are obtainable in moderate quantities.

The principal industry is fishing and salt evaporation.

The Swatow launch calls here about every five days.

Surrounding Country.—Open rolling plains of sand covered with coarse grass to the north-east, swampy ground to the east, and hills to the north.

There is a post office of second-class status.

Distances from Kitchioh

		miles.	
To Kweitam	by land	23	Route 6
Lukfung	,,	16½	,, 7

KITYANG (see Plan)

Determined { Latitude, 23° 32′ 49″ N.
Longitude, 116° 21′ 10″ E.

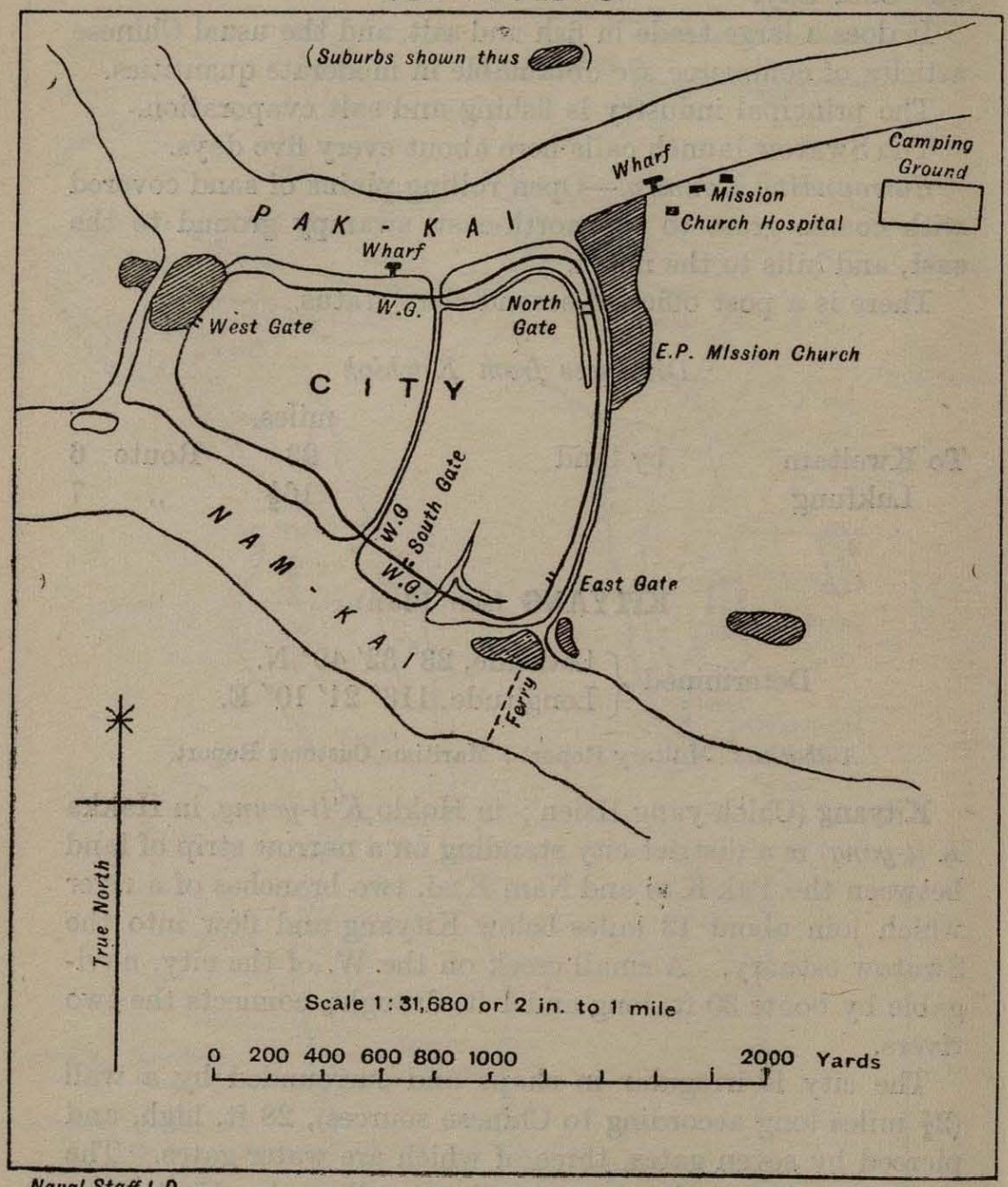
Authorities : Military Report ; Maritime Customs Report.

Kityang (Chieh-yang Hsien ; in Hoklo *K'it-yeung*, in Hakka *K'it-yang*) is a district city standing on a narrow strip of land between the Pak K'ai and Nam K'ai, two branches of a river which join about 13 miles below Kityang and flow into the Swatow estuary. A small creek on the W. of the city, navigable by boats 30 ft. long and 1 ft. draught, connects the two rivers.

The city is irregular in shape and surrounded by a wall (2¾ miles long according to Chinese sources), 28 ft. high, and pierced by seven gates, three of which are water-gates. The wall is weak and the gates small. Small creeks, 15 ft. wide and carrying a foot or so of water, run into the city but are of little use even for sampans.

There are two steamer wharves on the N. of the city and one in the north-east. These wharves are of wood and some

KITYANG



Naval Staff I.D

800 ft. long with a depth alongside of approximately 10 ft. at low water. The Pak K'ai and Nam K'ai Rivers are about 15 ft. deep and easily navigable by launches, except that there is a bar at the mouth of the Nam K'ai difficult to cross at very low water.

The suburbs are not extensive, that on the E. being the most important. The population is said to be 60,000.

The surrounding country for 3 or 4 miles is flat; but there are a few hills rising out of the plain to a height of 100 ft. The principal products of the district are rice, sugar (raw and refined), grass-cloth, hemp and hemp-thread. A tin mine was started in the neighbourhood by the Yüan I Tin Mine Co. in 1912, and it is stated that ore of good quality has been extracted. There were 27 brick and tile kilns in the district in the same year. Wolfram has been mined in this district since 1914.

The English Presbyterian and the American Baptist Missions are represented here.

A service of launches runs to and from Swatow, about 29 miles. There is a Chinese post office of second-class status.

Distances from Kityang

		miles.	
To Swatow	by water	32½	Route 30
Lukfung	by land	67¾	,, 31
Puning	,,	11½	,, 31
Kweitam	,,	43	,, 31

KIUNGCHOW: see Hoihow

KOCHOW (see Plan)

Approximate { Latitude, 21° 56′ 56″ N.
Longitude, 110° 45′ 13″ E.

Computed from Lat. and Long. at Shekku, taken by theodolite and watch.

Authorities: Mainly Lieuts. R. M. Crosse, G.S. and C. C. Chambers, R.G.A.

Kochow (Kao-chou Fu) is a prefectural city on the left bank of the Fau-shan Shui. The city is surrounded by a wall $1\frac{3}{4}$ mile in length and 25 ft. high, with a parapet 2 ft. thick and a berm of 15 ft. all round at a height of 19 ft. above the city level. The houses are built close up to the wall; and there are 5 gates, each protected by a bastion. The moat is about 3 ft. deep and varies in width from 15 to 10 ft. The city is well built over; and is said to have a population of about 40,000 of whom the majority are shopkeepers. The American Presbyterian Mission is represented here. There is a large trade not only in foreign goods, but also in all kinds of native produce, which men known as 'runners' hawk from one market to the next as far as the boundaries of Kwangsi. A large traffic is carried on in secondhand clothes: the chief exports are pigs, poultry, brown sugar and hemp.

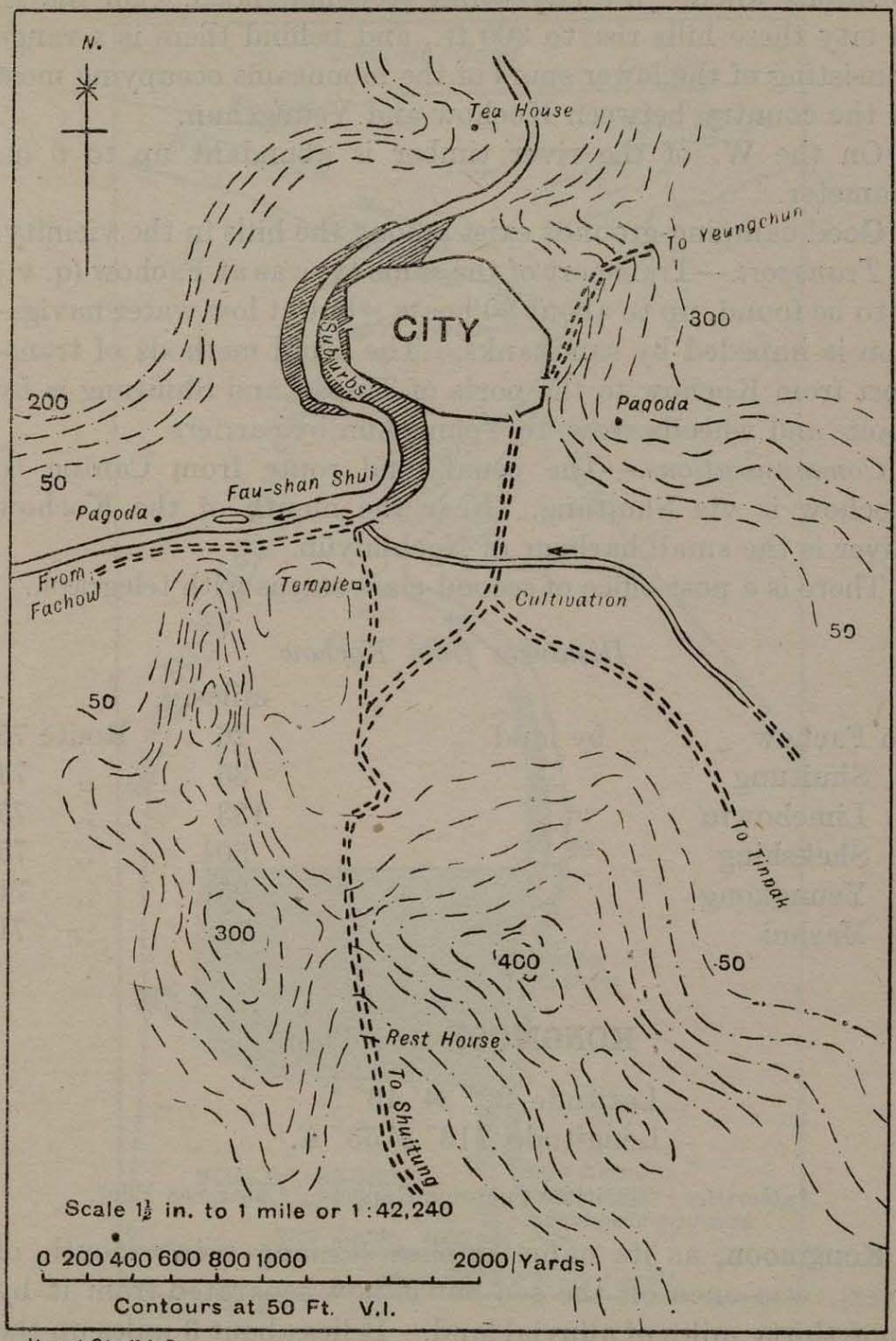
There are extensive suburbs to the north-west, west, and south-west and across the river; but trade is chiefly carried on in the city.

Troops.—Kochow is the principal military station in Kwangtung. Barracks, which are generally occupied by one regiment, have been built here for a mixed brigade. Large detachments are maintained at Fachow.

Supplies.—Supplies of a more 'Western' type than is generally the case in cities in Kwangtung can be obtained here. Flour up to 30 sacks should always be available in the city besides the usual Chinese commodities.

Surrounding country.—The surrounding country is hilly, but the hills are easily passable and afford good artillery

KOCHOW



Naval Staff I.D

positions whence the city could be commanded. On the E. of city these hills rise to 300 ft., and behind them is a range consisting of the lower spurs of the mountains occupying most of the country between Kochow and Yeungchun.

On the W. of the river timber is abundant up to 6 in. diameter.

Good camping-grounds exist among the hills in the vicinity.

Transport.—Transport of the same type as at Fachow (q. v.) is to be found, up to about 80 boats ; but at low water navigation is impeded by sandbanks. The usual methods of transport from Kochow to the ports of Tinpak and Shuitung is by coolie and wheelbarrow, to Yeungchun by carriers.

Communications.—The usual land route from Canton to Kochow is via Shuitung. Near the mouth of the Kochow River is the small harbour of Ngchünyün.

There is a post office of second-class status with telegraph.

Distances from Kochow

		miles.	
To Fachow	by land	26	Route 75
Shuitung	,,	35	,, 74
Limchowfu	,,	133	,, 75
Shekshing	,,	50½	,, 75
Yeungkong	,,	95	,, 71
Mashui	,,	73	,, 71

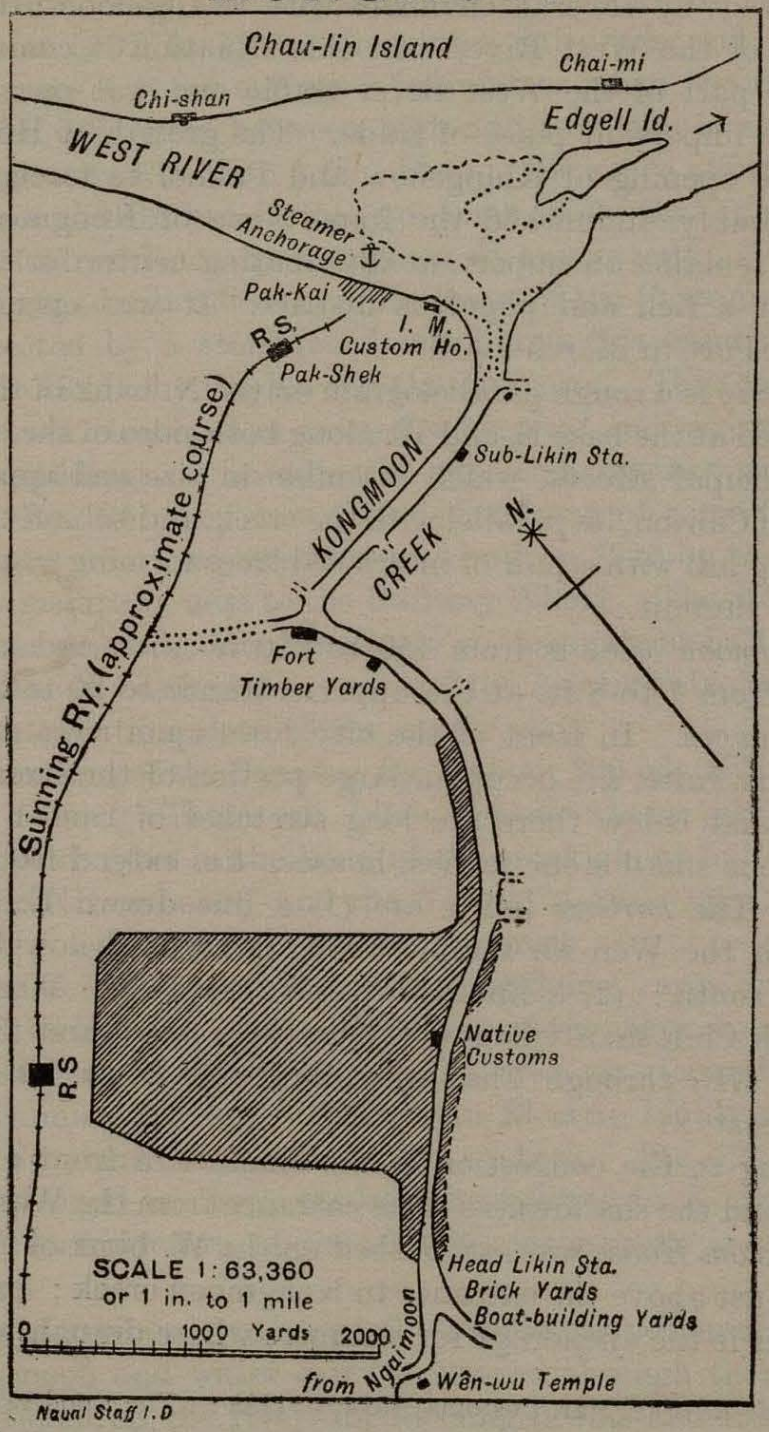
KONGMOON (see Plan)

Latitude, 22° 34′ 49″ N.
Longitude, 113° 8′ 53″ E.

Authorities : Maritime Customs Reports ; China Sea Pilot.

Kongmoon, as its name implies (Chiang mên = mouth of river), was once on the sea but is now separated from it by some thirty miles of alluvial land. It lies about 3 miles up the Kongmoon Creek which links the West River and the Ngaimoon, close to the junction of four mouths of the river—the

KONGMOON



Naval Staff I.D

Ngaimoon, Fotomoon, Niwanmoon, and Motomoon. It is also connected by several channels with Wangmoon, the fifth mouth of the West River. In this situation it commanded a large part of the West River traffic and was once an extremely important place of trade. The growth of Hongkong and the opening of Kiungchow and Pakhoi to foreign trade considerably diminished the importance of Kongmoon, but it still remains an important distributing centre for the produce of a rich and populous district. It was opened as a Treaty Port in March 1904.

The city is a rough parallelogram on the N. bank of the creek extended at the base E. and W. along both sides of the channel. Its principal streets, which resemble in size and appearance those of Canton, lie parallel with the creek, and behind the town is a long hill with a pair of interlaced trees forming a landmark on the summit.

Kongmoon creek is from 150 to 250 ft. wide and varies in depth from 7 to 8 ft. at the upper entrance to 20 to 25 ft. in other places. In front of the city rows upon rows of junks, sampans, rafts, &c. occupy a large portion of the stream, and above and below there are long stretches of timber rafts ;[1] numerous small stone jetties, houses, &c. extend from either bank. The *harbour* limits are (1) a line drawn E. and W. through the Wên-wu temple about 600 yds. below the city in the south ; (2) a line drawn SW. across the West River through Chih-shan village jetty on the north ; and (3) a line drawn NE. through Chai-mi village and Li-yu hill on the north-east.

Owing to the congestion of the channel in front of Kongmoon and the shallowness of its entrance from the West River, the *Custom House* was established on the W. bank of the West River just above the entrance to Kongmoon creek ; and opposite this is the anchorage for steamers whose draught does not

[1] *Trade Returns* (Mar. Customs) 1914, p. 1138 : 'The wood rafts, which apparently had from time immemorial anchored and blocked up the Kongmoon creek to a dangerous extent, were removed in August and made to anchor outside the northern limit of the harbour.'

permit access to Kongmoon itself. There is depth of 12 to 13 ft. at low water, and the range of the annual rise and fall of the river is 12 to 13 ft. In winter daily rise and fall of tide averages 4 ft. at springs : in summer when the river is higher the difference between high and low tide is smaller, sometimes even less than 1 ft. Here is the space allotted for a *foreign settlement* but it does not seem likely that it will be adopted for residence by foreigners to any extent.

The foreign-built offices and dwellings of the Custom House are protected by a stone-faced bund, and this bund is continued for 188 ft. by the Kwong-On Company. The Canadian Presbyterian Mission has erected a hospital and several substantial buildings on an adjacent site, and together with the Sunning Ry. Co. they have bunded a front of some 780 ft. A large new wharf for steamers was built in 1916 by the Luen Hop Steamship Co. next to the Railway Wharf. The Standard Oil Co. has erected a large tank and go-down about half a mile away on the N. bank of the creek and the Asiatic Petroleum Co. has an installation close to the native city.

The terminus of the *Sunning Ry.* is about 300 yds. SW. of the Custom House. There are *Likin stations* above and below the city, and a *fort* in the bend of the creek about half a mile above the NE. suburb ; and the *Native Customs Office* is situated in the centre of the town on the creek.

Industries.—Brick-yards and boat-building yards are situated on the S. bank at the SW. limit of the city ; and there are cotton-mills, paper-mills, silk-filatures, six rice-mills, and a fruit-canning factory. There is an Electric Lighting Company. Numbers of rafts are broken up here. The silk cocoon trade of Jungki has been recently transferred to Kongmoon ; and the manufacture of lime from oyster-shells is another industry.

Iron water-pipes have been laid down in the principal streets of Kongmoon and water can be pumped through them by a steam launch on the river, for flushing drains and for use in case of fire. There is a native hospital in Kongmoon city.

Kongmoon is a centre of emigration.

Estimates of the **population** vary considerably ; but 80,000 would seem to be near the mark.

The *surrounding country* is fertile and highly cultivated, the chief crop being rice. Mulberry trees are grown in certain districts, and there is an increasing number of fruit orchards. Vegetables are grown in abundance ; and in various parts tea, tobacco, fan-palms, sugar-canes, and orange trees are highly successful cultures. Quantities of poultry, eggs, and pigs are sent to the local markets, but the grazing of sheep and cattle is little practised. The mountainous parts of the district are in the NW. and SW. ; there are no extensive forests. Fishing is the chief industry on the coast, and fresh-water fish-breeding forms an important trade at Kowkong. The country is picturesque, fertile, highly cultivated, and thickly populated. It is closely studded with large, well-built villages, and the inhabitants appear prosperous, industrious, and fairly friendly. Kongmoon is the 'garden and farm' of Hongkong ; and thousands of baskets of eggs, fruit, and vegetables are sent to the British colony.

Administration.—Kongmoon is under the administration of the district city Sunwui, which is five miles distant, and cases are tried and settled by the Sunwui magistrates.

A police station was established in 1914, but the police force was converted in that year into a patrolling force of 30 men. Water police also existed prior to 1911 ; they were dispersed at the Revolution and it is not clear whether they have been restored.

Foreign residents.—A few officials of the Customs, commercial agents and mission staffs live at Kongmoon : the British and German consuls reside at Canton and the Italian consul or representative is at Hongkong.

Mission Schools recently opened in the district include 3 at Shekki (Heungshan) two of them Canadian Mission, and one C.M.S. : 3 missions are at work in Sunwui district—Berlin, American Baptist, and Canadian Mission. The Berlin has a girls' school in Sunwui. The Baptist has 6 schools in Kongmoon and Kutsing. The Canadian Mission has 8 schools in

the district, and a boys' boarding school at Kongmoon, and it opened in 1916 two schools for boys and girls.

Currency.—Provincial silver dollar currency with subsidiary 10- and 20-cent pieces in silver and 1-cent copper pieces are largely used : the favourite coin being the 20-cent piece. Old tael standards still continue and here we have the Kongmoon tael, Sailam tael, Ha kwan tael, and Native Customs tael. The Kongmoon tael weight is slightly higher than the Sailam and lower than the Haikwan : it stands at 110·66 to 100 Haikwan taels. Provincial bank notes and Hongkong bank notes have wide circulation.

Supplies.—Provisions are scarce at Kongmoon but there must be large supplies of poultry, vegetables, fruit, tea, and tobacco available.

Shipping Returns 1916 give as entered and cleared under General Regulations, 2,761 vessels with aggregate tonnage of 719,856 : under Inland Steam Navigation Rules 13,734 with aggregate tonnage of 226,588. Junks entered and cleared at the Native Customs totalled 3,992.

Junk and launch traffic in this year was greatly diminished by the prevalence of piracy.

Exports.—Chief articles of export are pigs, poultry, vegetables, fruit, tobacco, sugar, tea, palm-fans, gunny bags, matting, and medicines.

Water Communications.—There is daily communication with Hongkong and Macao. The largest and quickest steamers are owned by Butterfield & Swire, Jardine Matheson & Co., and the Hongkong, Canton & Macao Steamboat Co., and there are several French, Italian, Portuguese, and Chinese vessels. Large junks go regularly to Hongkong, Macao, Hainan, and to the coast towns. The West River is the main channel for traffic inland to Canton, Fatshan, Samshui and up the river to Wuchow ; and the numerous waterways of the delta carry a lively trade through a busy and populous country. There is large passenger traffic in boats towed by launches with Canton, Fatshan, Sunchong, &c. The district town of Sunwui lies at the end of the Kongmoon creek

about 5 miles off, and by it is the mouth of the Tamkong River, a fine waterway with plenty of depth to just below Sunchong. Kongmoon creek is on the direct route from the Delta to the southern prefectures of Kochow, Limchow, Luichow, and Kiungchow.

Railway.—The Sunning Railway passes through the populous Sunwui and Sunning districts, running from Kongmoon west to Kungyifow and thence south to Sunning and the port of Samgaphoi. It is proposed to build an extension to Yeungkong.

Roads.—There are a few 8 ft. roads with a single line of paving stones in the middle, but communication is mainly by water. A good Chinese road runs from Kongmoon to Sunwui.

Post and Telegraphs.—Post (second class) and telegraph offices in Kongmoon city and at the port.

Distances from Kongmoon

		miles	
To Canton	by water (steamer route)	81	
Canton	,, (launch route)	54	Route 52
Samshui	,,	43½	
Macao	,,	45	
Hongkong	,,	87	
Kungyifow	by rail	30	
Kungiyfow	by water	33	,, 53
Sunwui	by rail	5	
Sunwui	by water	8	,, 53
Sunning	by rail	45	
Sunchong	by water	39	,, 53
Yeungkong	by water and land	105	,, 53

KOWKONG

Approximate { Latitude, 22° 50′ N.
Longitude, 113° 3′ E.

Authorities : Maritime Customs Reports ; Henry, Lingnam ; Ray, Geography of Kwongtung.

Kowkong (Chiu-chiang) on the left bank of the West River about 20 miles north of Kongmoon is one of the large group of populous towns in the silk-growing district. It embraces a great cluster of villages spread over an area 7 to 8 miles long and 3 to 4 miles wide, and it is said that this group alone was capable of producing 300,000 men at the time of the T'ai-p'ing rebellion. This estimate, however, is probably greatly exaggerated though there is no doubt that the **population** of the district is very large. Kowkong is administered by a town council and has strict laws against gambling, prostitution, &c. There is an important school, the Yüeh-lam Shu-yüan, one of the best in the province. Fish-breeding is an industry of the place. There is a Weaving Company and an Electric Lighting Co., but the district has been slow to introduce modern machinery and is intensely anti-foreign. Kowkong was opened as a passenger station on the West River in 1905.

The *surrounding country* is flat with isolated hills or groups of hills, and is liable to be flooded.

There is a second-class post office.

Other large towns in the neighbourhood are :

Kumchuk (Kan-chu) at the junction of the Kumchuk Creek and West River about 2 miles SW. of Kowkong. It is a busy mart and one of the ports of call of the West River.

Laklow (Lê-lou) on a creek of the same name which leads into the Shuntuk Branch, and Lungshan Tung opposite to it.

Lungking on the Shuntuk Branch a few miles higher up.

Kwanshan on the right bank of the same creek north of the Sai-chin hills, and Shatow E. close to Kwanshan.

Kulo (Ku-lao) on the right bank of the West River opposite Kowkong, is a port of call for passengers since 1905. The

Kulo hills are covered with camphor trees and tea plantations. Tobacco is also grown in the neighbourhood.

Distances from Kowkong

		miles.
To Canton	by water	72
Samshui	,,	27
Kongmoon	,,	20

KUNGYIFOW

Approximate { Latitude, 22° 24′ N. / Longitude, 112° 38′ E.

Authorities : Maritime Customs Reports ; Official Guide.

Kungyifow (Kung-i-fou) on the right bank of the Tam-kong River opposite the old town of Tamshuihow is a new commercial town built since 1907 by wealthy emigrants returned from America. A mile of new embankments protect the town along the river and the front which has been well bunded with stone. The town is laid out in seven streets running N. and S. and five streets running E. and W. The streets are macadamized and provided with pavements ; and the houses are in European style with two or three stories and lighted by electricity. The **population** is about 2,000 and the inhabitants mostly affect European clothing.

Kungyifow is in communication with Kongmoon by a river service and by the *Sunning Railway*, of the northern section of which it is a terminus.

It has a second-class post office.

Distances from Kungyifow

		miles.	
To Kongmoon	by rail	30	
Kongmoon	by water	33	Route 53
Sunning	by rail	15	
Sunchong	by water	6	,, 53
Yeungkong	by land and water	72	,, 53

KWAISHIN (for Plan see Waichow, p. 681)

Approximate { Latitude, 23° 9′ N.
Longitude, 114° 39′ E.

Authority : Military Report.

Kwaishin (Kuei-shan Hsien) is a district city situated on the peninsula formed by the East and Tamshui Ho (Samtohü) Rivers. The walls are 30 ft. high and the city is ½ mile square. There is a small hill inside the walls. There are only official residences within the walls, the business quarter being in the western suburb, which stretches from the walls to the bridge of boats which gives access to Waichow (q. v.). The suburb has many good shops where a limited variety of European commodities can be obtained, such as drugs, groceries, foreign boots and clothes.

The *surrounding country* is flat. Waichow is distant one mile to the W.

For *Distances from Kwaishin* see Waichow.

KWEITAM

Approximate { Latitude, 23° 04′ 30″ N.
Longitude, 115° 58′ 11″ E.

Authority : Military Report.

Kweitam (Kuei-T'am, Hoklo pronunciation ; Cantonese, Kuai-t'am) is a small walled city on the borders of the Hoklo and Hakka districts, on the right bank of the Lung Chiang. The walls are 25 ft. high, and thinner than the ordinary city walls. They are neither loopholed nor crenellated. The principal business quarter is in the northern suburb. Charcoal burnt in the hills north of the town is brought here to be shipped to Hweilaihsien and other places.

The English Presbyterian Mission has a station here, but no resident English Missionary.

Surrounding country.—The town stands on a small bluff on the right bank of the Lengkang River. It is surrounded by low rolling hills, the foothills of higher hills which rise to 3,000 ft. in the north and east.

There is a postal agency.

Distances from Kweitam

		miles.	
To Kitchioh	by land	23	Route 6
Hweilaihsien	by water	29	,, 5
Kityang	by land	43	,, 31
Lukfung	,,	24¾	,, 31

LIMCHOWFU (see Plan)

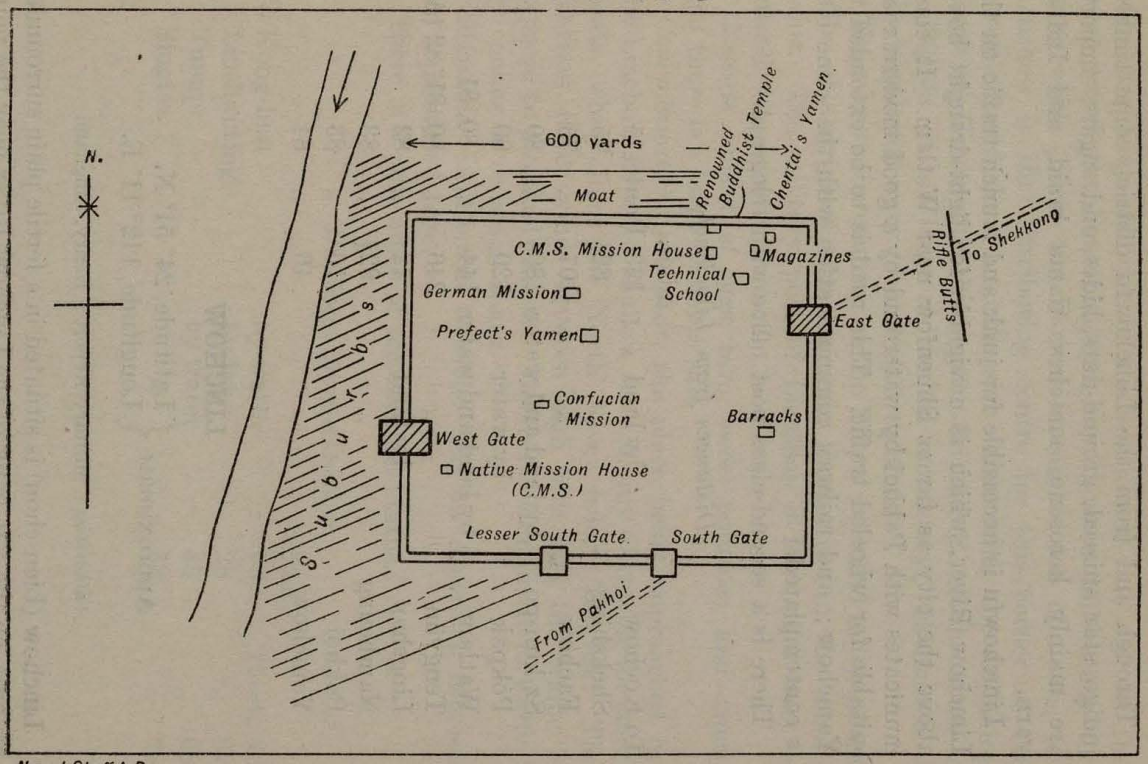
Approximate { Latitude, 21° 40′ 28″ N. / Longitude, 109° 08′ 40″ E.

Authority: Mainly Capt. G. F. Brierley, D.S.O., 1908.

Limchowfu (Lien-chou Fu) is a prefectural city on the left bank of the Limchow River about 6 miles from its mouth in Pakhoi bay. The walls are about 2¾ miles long and 20 ft. thick, pierced by four gates, one each on the E. and W. faces and two on the N. The walls were built about A. D. 1090 and revetted with brick about 1430. Outside the wall on the N. face is a wide and deep canal : on the W. the space between the wall and the river is built over : and on the E. are suburbs extending for about one mile.

Within the walls the north-east portion of the city is partially clear of buildings. Here are the Mission House (French), the former military commander's *yamên*, the magazine, and a fine building erected in memory of a former official, renowned for his integrity. There are said to be about 25,000 inhabitants. The American Presbyterian Mission (Northern) and the Church Missionary Society have stations here.

LIMCHOWFU



Naval Staff I.D

Through and from the Limchowfu district come timber, indigo, star aniseed, ground-nuts, hides, and sugar; imports are mainly kerosene, matches, Uama braid, and Indian yarn.

Limchowfu is accessible for junk and launch traffic on the Limchow River, which is navigable for light-draught boats above the city as far as Shuenfow near Watlam. It communicates with Pakhoi by water and by a good modern road suitable for wheeled traffic. This road is to be extended to Yamchow; and railway communication with the same city is contemplated.

There is a second-class post office with telegraph.

Distances from Limchowfu

		miles.		
To Kochow	by land	133	Route	75
Shekshing	,,	82½	,,	75
Fachow	,,	107	,,	75
Sz-kun-po	by land and water	180½	,,	80
Pokpak	by water	120	,,	80
Watlam	by land and water	144	,,	80, 81
Tengyün	,,	246	,,	80, 81, 82 (A)
Lingshan	by land	72	,,	83
Namheung	,,	92¾	,,	83
Pakhoi	,,	16	,,	83
Yamchow	,,	46	,,	84

LINCHOW

Approximate { Latitude, 24° 51′ N.
Longitude, 112° 11′ E.

Authorities: Military Report; Henry, Lingnam.

Linchow (Lien-chou) is situated in a fertile plain surrounded by hills, on the left bank of the Linchow River near the point where the borders of Hunan and Kwangsi meet. The city is small with walls about 2,000 yds. long and 26 ft. high, but

there are busy suburbs on the south-east side and on the west where the houses stretch for about a mile along the river bank. Here the narrow stream is full of boats, for Linchow is the distributing centre for this corner of the province and does an extensive trade with the adjoining parts of Hunan and Kwangsi. On the E. of the town is a pagoda with a large red-walled monastery. Estimates of the **population** vary from 20,000 to 50,000.

Near by is the country of the **Yiu,** a wild and independent tribe of aborigines who maintain themselves in the mountains. The military post of Lienshan a few miles west is intended to control them.

Exports consist of eggs, taro, sweet potatoes, and canes, and there is a large traffic in salt.

Communications are poor, the place being approached by the Linchow River, a shallow stream only navigable for small boats, which joins the North River below Yingtak. The Linchow River winds between high hills and the traffic is exposed to piratical attacks. Goods for Hunan are forwarded by coolies or on small boats.

Missions.—A Roman Catholic and an American Mission are represented here.

There is a post office of second-class status.

Distances from Linchow

		miles.	
To Kong-hau	by water	98	Route 66
Linshanting	by land	28	,, 67
Tungpi	by water	45	,, 68
Singtsz	,,	32	,, 69

LINGSHAN (see Plan)

Approximate { Latitude, 22° 19′ N. / Longitude, 119° 10′ E.

Authorities: S. L. Ralph, 8th Rajputs; C. C. Chambers, R.G.A.

Lingshan (Ling-shan-Hsien) is a small district town N. of Limchowfu aud on the borders of Kwangsi.

The city is rectangular in shape, and is surrounded by a wall, but has no moat. The perimeter is 1¼ mile. The wall is 25 ft. high with a parapet 2 ft. thick, both crenellated and loopholed. Inside there is a berm 8 ft. broad. There are 4 gates as shown in the plan, each of which is protected by a bastion of the same nature as the wall.

The interior is well built over, except in the north-east corner. There are extensive suburbs to the east and south but none on the north or west. The population is said to be about 8,000.

Surrounding Country.—The city stands in a cultivated plain. Some low hills, ¼ to ½ mile away to the north, command it. On the west, just outside, are the Lingshan rocks, craggy, precipitous formations which rise very abruptly out of the plain to a height of 500 ft. They are honeycombed with caves from which a very fine marble is quarried. The district is the most fertile in the Limchowfu prefecture.

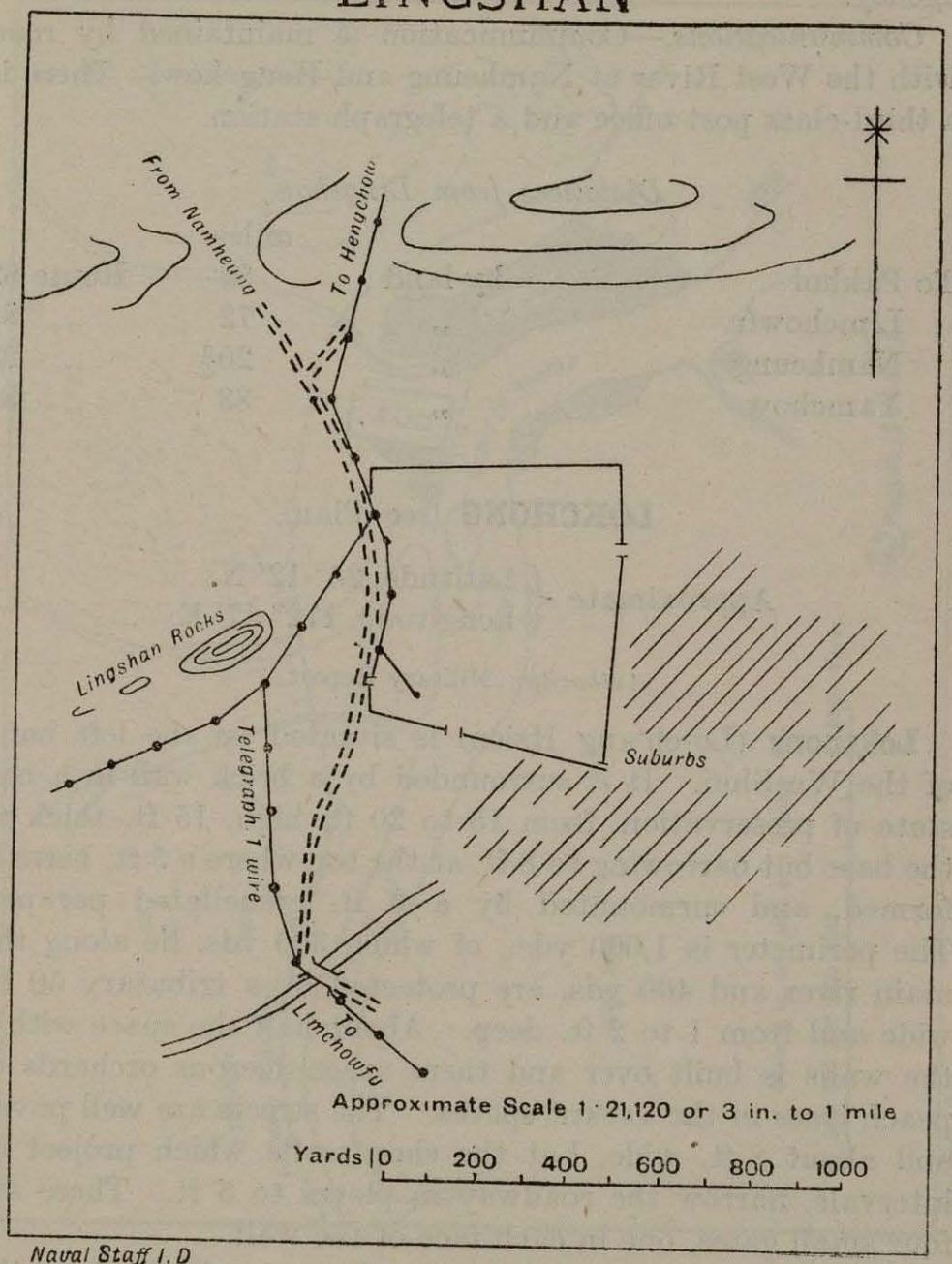
Trade and Supplies.—A very large trade is carried on in bones, used as a manure on the fields, and in hides.

The usual supplies would be found, but not in large quantities. Rice and flour are obtainable in moderate quantities. Small Indian bullocks and water buffaloes being used in the district for agricultural purposes, beef would generally be procurable; charcoal and kerosene oil are obtainable in moderate quantities.

Transport is altogether by coolies; a few farm carts are the only wheeled vehicles.

Missions.—The French Mission Êtrangère and the American Presbyterian Mission have stations in Lingshan with resident

LINGSHAN



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missionaries. The Church Missionary Society has a native agency.

Communications.—Communication is maintained by road with the West River at Namheung and Hengchow. There is a third-class post office and a telegraph station.

Distances from Lingshan

		miles.	
To Pakhoi	by land	88	Route 83
Limchowfu	,,	72	,, 83
Namheung	,,	$20\frac{3}{4}$	,, 83
Yamchow	,,	83	,, 85

LOKCHONG (see Plan)

Approximate { Latitude, 25° 12′ N. / Longitude, 112° 57′ E.

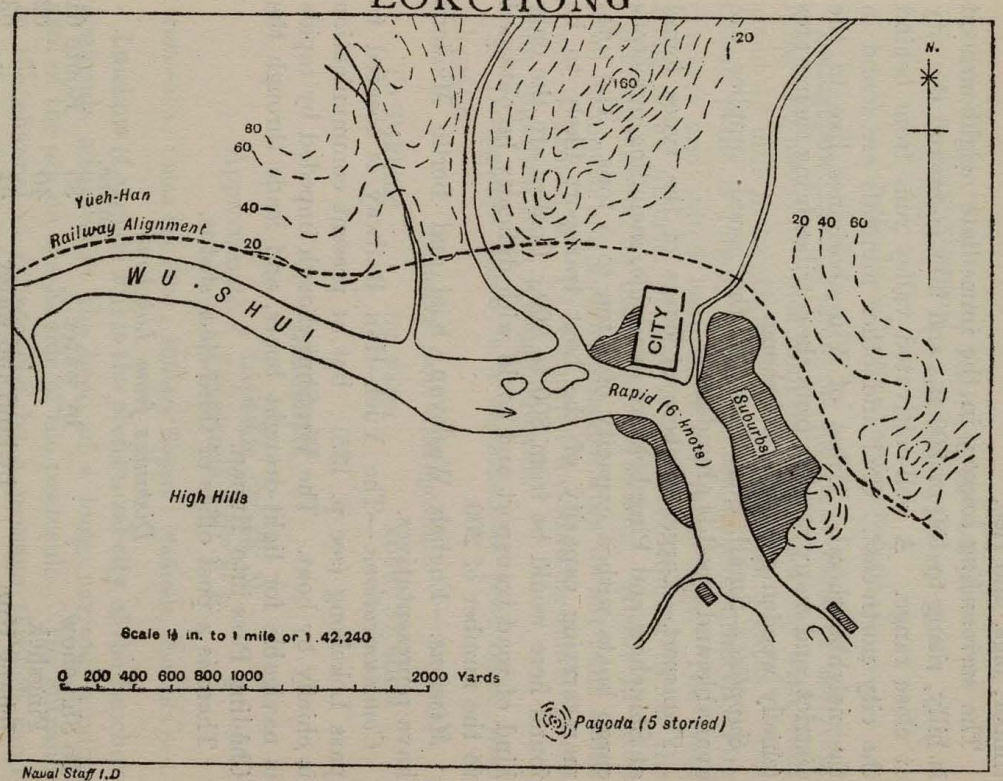
Authority : Military Report.

Lokchong (Lo-ch'ang Hsien) is situated on the left bank of the Wu Shui. It is surrounded by a brick wall in a bad state of preservation, from 15 to 20 ft. high, 15 ft. thick at the base but narrowing to 8 ft. at the top where a 5 ft. berm is formed, and surmounted by a 6 ft. crenellated parapet. The perimeter is 1,000 yds., of which 300 yds. lie along the main river and 400 yds. are protected by a tributary 50 ft. wide and from 1 to 2 ft. deep. About half the space within the walls is built over and there are numerous orchards of peach trees in the vacant spaces. The streets are well paved and about 8 ft. wide, but the shop walls, which project at intervals, narrow the roadway in places to 5 ft. There are four small gates, one in each face of the wall.

The main business quarter is in the east suburb along the water front ; and a smaller suburb lies on the W. of the city and also to the S. along the opposite bank of the river.

The **population** of the city including suburbs is estimated at 30,000. A big trade is done with all the markets as far as

LOKCHONG



Naval Staff I.D

Kweichow and Hunan ; and the chief exports are pea-nut oil, timber, pigs, and rice.

The *surrounding country* in the immediate neighbourhood is hilly, rising to 150 or 200 ft., and hills command the city at close range. A well-cultivated valley runs from behind the city north-east. Coal and other minerals are found in the neighbourhood. Tribes of Yiu aborigines live in the district, and many carriers from these tribes bring their wares (chiefly wooden goods) to Lokchong.

Supplies.—Small quantities of the usual supplies are available and wood is abundant.

Transport.—Large numbers of boats of the types found at Shiuchow and Pingshek are available, including numerous cargo boats with a capacity of ½ ton to 5 tons. The total man-carrying capacity of the boat transport likely to be found here would be from 800 to 900. Coolies are the only kind of road transport and could with difficulty be obtained to the number of 200.

Missions.—English Wesleyan, Kiel and Berlin Missions have representatives.

Communications.—The Yüeh–Han Railway is located to pass Lokchong (see p. 135) ; but at present communication is chiefly by boat. The Wu Shui though impeded by rapids is navigable for light-draught boats, and leads through the Chê-ling Pass into Hunan.

There is a post office of third-class status.

Distances from Lokchong

		miles.	
To Shiuchow	by water	35	Route 61
Pingshek	,,	40	,, 62
Ichang Hun	by land and water	52	,, 63

LOTINGCHOW

Approximate { Latitude, 22° 44′ N. / Longitude, 111° 23′ E.

Authorities : Maritime Customs Reports.

Lotingchow (Lo-ting Chou) on the right bank of the Nam Kong and about 37 miles from its mouth is a city with walls about 1¾ mile in length and 20 ft. high with 3 gates. The Cassia plant is largely grown in the neighbourhood. Fire crackers and salted bean curd are made here. The Nam Kong is an affluent of the West River coming in on the right bank about 3½ miles below Takhing. About 12 miles from its mouth and a short distance from its left bank is the town of Lintan (P., T.) celebrated for matting made of the hemp imported from Kwangchowwan.

At Lotingchow there is a second-class post office with telegraph.

Distance from Lotingchow

To Takhing	by water	about 37 miles

LUICHOW

Approximate { Latitude, 20° 54′ N. / Longitude, 110° 5′ E.

Authorities : China Sea Pilot ; Military Report ; Madrolle, Chine du Sud.

Luichow (Lei-chou Fu) is the prefectural city of the Luichow peninsula situated at the head of a long, narrow, winding arm of the sea on the E. side of the peninsula. The entrance to the channel is approached by a passage through sand-banks on the S. side of Tan-hai island ; and the channel itself is almost empty at low tide but may be used by vessels drawing 10 ft. draught at high water.

The walls of the city are about 3 miles long and 30 ft. high, and the moat is said to be 36 ft. wide. The river flows round

the southern side of the city. The **population** is said to be 40,000. There is a French Catholic Mission.

The surrounding country is a barren, sandy plain with oases here and there in which rice is grown and cattle are reared.

The chief exports are cattle, poultry, and matting. There is a considerable coasting trade with Kongmoon and other ports. Large quantities of mats are brought to Hongkong and Macao by the Luichow steamers, which now include the S.S. *Hungon.*

A tortuous channel with about 1 fathom of water at low tide connects the entrance of Luichow estuary with Kwang-chowwan round the W. side of Tan-hai island.

There is a post office of second-class status with telegraph.

Distances from Luichow

		miles	
To Pak-chong	by land	50½	Route 76
Süwenyun	,,	41½	,, 76
Suikai	,,	35½	,, 76

LUKFUNG (see Plan)

Approximate { Latitude, 22° 56′ 30″.
Longitude, 115° 37′ 30″.

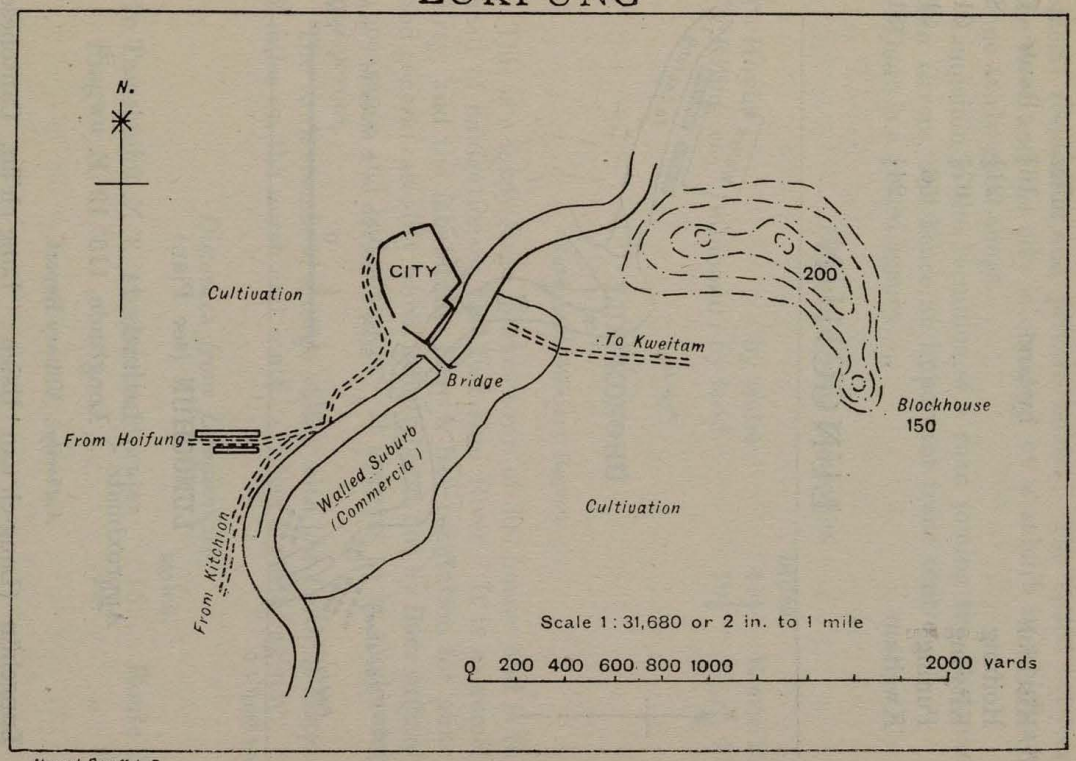
Authority: Military Report.

The district city of Lukfung (Lu-fêng Hsien) is generally known locally as **Tang-hai.** The city is enclosed by a wall 30 ft. high measuring some ¼ mile in each direction. Good permanent accommodation for troops could be found in the various temples and *yamens* in the town. There is a large busy suburb on the west with large quantities of the usual Chinese commodities; see under Swabue. The principal industry is indigo-drying.

The English Presbyterian Mission have a room here.

The *surrounding country* is generally flat and sandy, much cut up with creeks. Low hills rise to the NW. of the city.

LUKFUNG

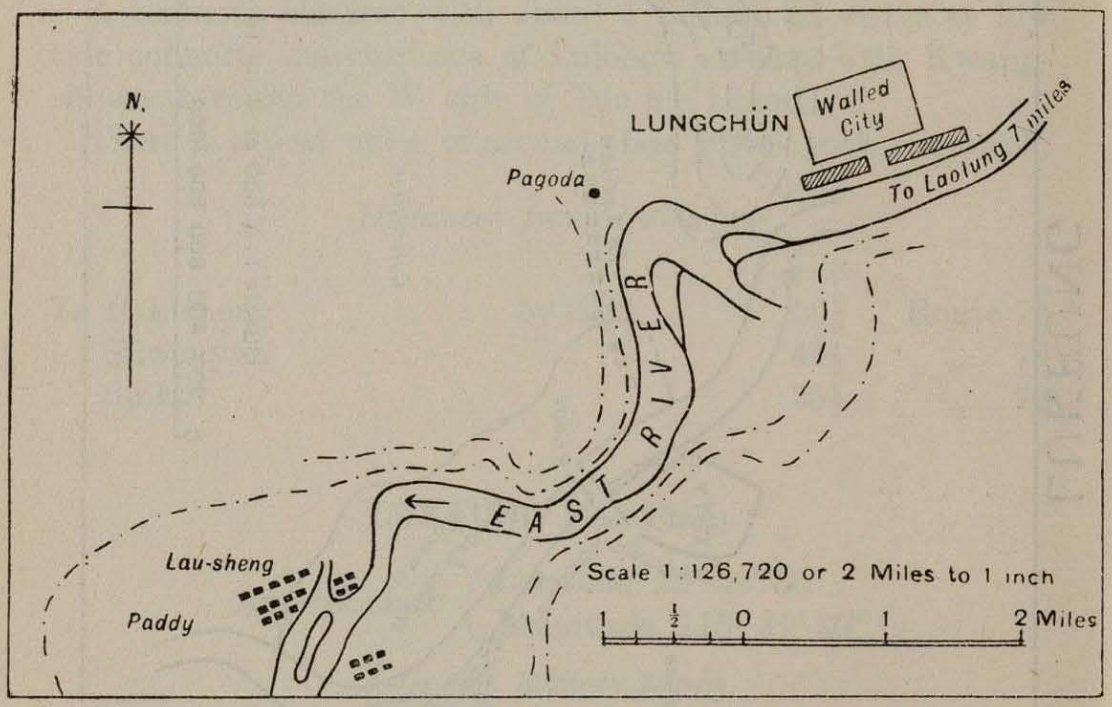


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Distances from Lukfung

		miles.		
To Kitchioh	by land	16½	Route	7
Hoifung	,,	21¼	,,	8
Kityang	,,	67¾	,,	31
Puning	,,	56	,,	31
Kweitam	,,	24½	,,	31

LUNGCHÜN



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LUNGCHÜN (see Plan)

Approximate { Latitude, 24° 3′ N.
Longitude, 115° 19′ E.

Authority : Military Report.

Lungchün (Lung-ch'uan Hsien : Lung-ch'ün, Cantonese pronunciation ; in Hakka, Liung-ch'on) is a district city, situated on the west bank of the East River 85 miles above Waichow. The **population** is estimated at about 40,000.

The official city is near the river bank and is occupied by official residences and private houses. The space between the river and the city is occupied by a suburb in which are some fairly good shops.

Lungchün is the terminus of a road joining the East and Han Rivers, and hence an important trade centre.

There is a postal agency.

Distances from Lungchün

		miles.	
To Hoyün	by water	41½	Route 22
Kiling	by land	19¼	,, 23

LUNGKONGHÜ

Authority: Military Report.

This is a fairly large market town of 300 houses and is the head of navigation on the Tam-shui River. It is extremely dirty, and the inhabitants have a bad reputation for piracy and general rascality which is fully borne out by their ruffianly appearance and bad manners. It appears to be moderately prosperous.

The town stands in a large valley with low foothills distant 2 miles on the north and south. It has a postal agency.

Distances from Lungkonghü

		miles.	
To Tamshuihü	by land and water	15	Route 20
Pingwu	,,	14	,, 21

MUILUK

Approximate { Latitude, 21° 33′ N. / Longitude, 100° 46′ E.

Authority : Ray, Geography of Kwongtung.

Muiluk (Mei-lu), on the left bank of the Kam Kiang near its junction with the river which flows past Fachow and Kochow, has been called ' Little Fatshan '. It has a trade with the whole of the southern prefectures in bricks and tiles, and imports most of the foreign goods consumed below Kochow City. Formerly most of the trade was done with Kwangchowwan, but in recent years the carriage by bullock wagons from Shuitung has proved both cheaper and speedier. There is now a project to open a new port at Pok-man-kong, which lies up a little creek about 6 miles away on the sea coast. If successful this project would seriously interfere with the trade of both Shuitung and Kwangchowwan. In addition to bricks and tiles, Muiluk manufactures cheap brassware, scissors, and knives ; and there is a considerable export of timber which has been floated down the Kochow River from Sunyi and beyond, as well as down the river which flows from Kwangsi into the Kochow River at Fachow. The latter has water only in the rainy season. The **population** of Muiluk is said to number about 40,000. There is water communication between Muiluk, Fachow, and Kochow, and from Muiluk to the sea.

There is a post office of second-class status.

Distances from Muiluk

		miles
To Fachow	by water	about 18
The sea	,,	,, 19

NAMYUNG

Approximate { Latitude, 25° 14′ N.
Longitude, 114° 5′ E.

Height above sea level, 380 ft.

Authorities: Military Report; Ray, Geography of Kwongtung.

Namyung (Nan-hsiung Chou) is an important city at the head of navigation of the Tsêng River. It is situated between two branches of the river one of which passes its southern suburb and the other near its western side. The walls are about 2½ miles long and there are large and busy suburbs especially on the south side. Estimates of the **population** differ widely, 35,000, 87,000, and 120,000 being variously given. The people of the district are almost entirely Hakkas. Namyung is historically interesting as the place at which the present inhabitants of Kwangtung first settled, and it has been commercially important for centuries as an entrepôt on the great trade route from Canton to the north. Goods are here unloaded from boats and transferred to coolies for transport over the Mei-ling Pass to Nananfu in Kiangsi. The principal exports are tobacco, paper, pea-nut oil and camelia oil, timber, and rice.

Surrounding Country.—The country in general is very fertile, with a pinkish-coloured soil from which a haze of dust, unpleasant for the eyes, rises in dry weather. North-west and west of the city are rolling plains dotted with numerous small villages. There are hills 7½ miles distant to the south-east and 13½ miles to the NNW., and the Mei-ling Pass is crossed at 1,510 ft. altitude, 18¼ miles distant. Rice and tobacco are largely cultivated and great quantities of timber are cut down.

Missions.—There is a German missionary in the city and another at Hsiu-jên 4½ miles W.; and a French priest of the Missions Étrangères at Kiang-kong about 3 miles E. of the East Gate.

Transport.—Light-draught boats on the river and coolies on the road are the only means of transport. Coolies are available in very large numbers but there are no wheel-barrows.

Communications.—Light-draught boats come up the Tsêng River at all seasons; and in the wet period in May and June it would be possible for river gun-boats to ascend. There is a stone bridge over the river leading to the south suburb and another over the branch on the W. of the city. The road from Shiuchow is a footpath 3 or 4 ft. wide and mostly paved with uneven cobbles; between Namyung and the Mei-ling Pass the road widens to 8 or 10 ft. and is cobbled, but there are as a rule smooth paths alongside.

There is a post office of second-class status and telegraph.

Distances from Namyung

		miles.	
To Shiuchow	by land	71¾	Route 59
Canton	by land and water	244	Routes 54, 56, and 59
Nananfu	by land	24½	Route 60

NODOA

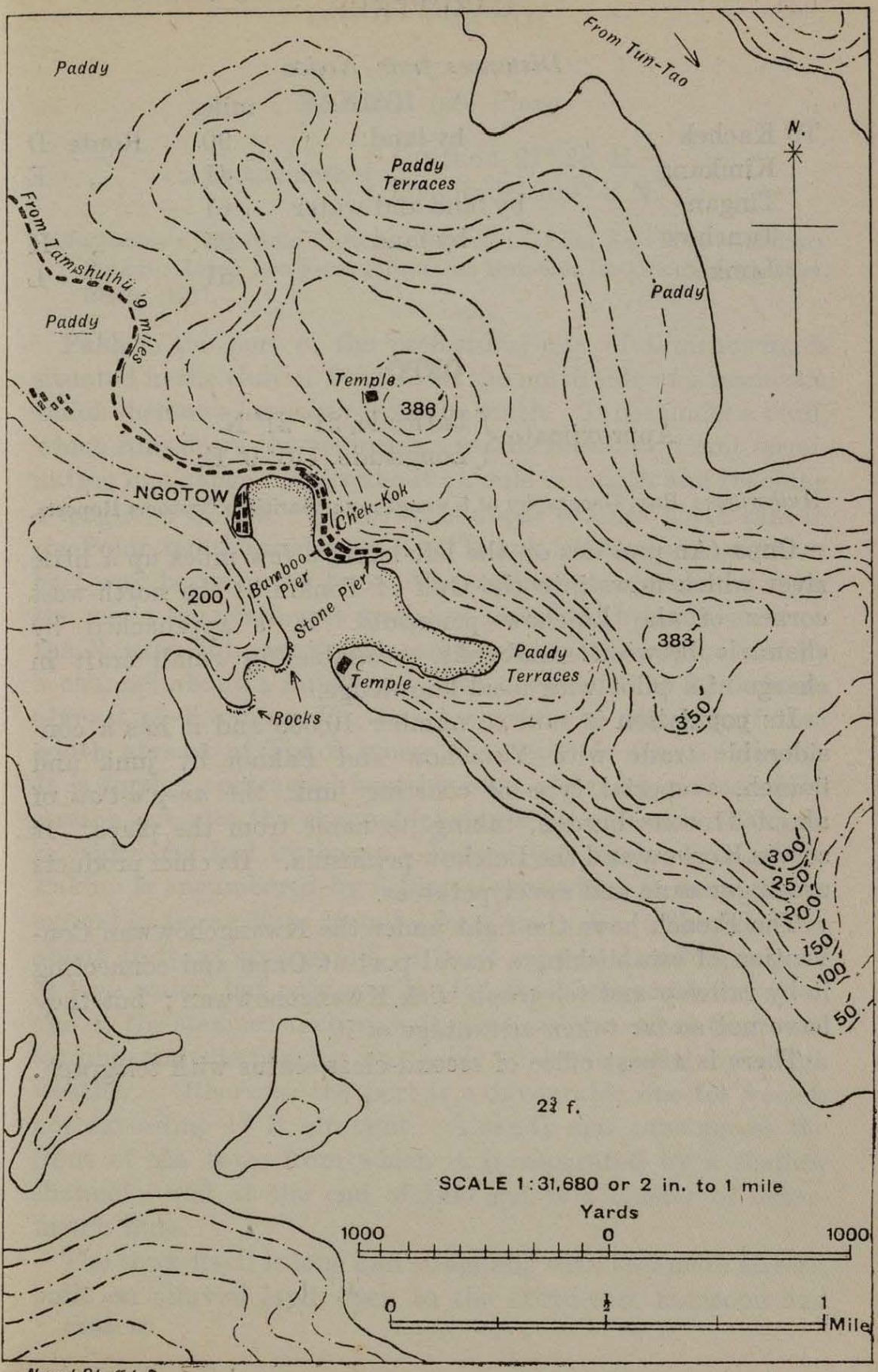
Approximate { Latitude, 19° 32′ N. / Longitude, 109° 35′ E.

Authorities: Pearson's Report; Henry, Lingnam.

Nodoa (Na-ta) is a market town in the Hakka district in northern Hainan and the point of junction of several routes. It has long been a centre of missionary activity and the American Presbyterian Mission has a large station there with school and hospital. The population has been estimated at about 3,000. A tin-mine in the neighbourhood was being worked in 1916.

There is a postal agency.

NGOTOW LANDING PLACE



Naval Staff I.D

Distances from Nodoa

		miles.	
To Kachek	by land	90	Route D
Kimkang	,,	41	,, E
Tingan	by land and water	61	
Tanchow	by land	25	,, H
Limko	,,	51	,, L

ONPO

Approximate { Latitude, 21° 21′ N. / Longitude, 110° 0′ E.

Authorities: Ray, Geography of Kwongtung; Maritime Customs Reports.

Onpo (An-p'u) lies on the left bank, a few miles up a little river which flows into the Gulf of Tonkin at the north-west corner of the Luichow peninsula. It is approached by channels between sandbanks, available for small craft in charge of a pilot with local knowledge.

Its **population** is said to number 10,000 and it has a considerable trade with Yamchow and Pakhoi by junk and launch, a special type of coasting junk, the *an-p'u-t'ou* of about 41 tons burden, taking its name from the place. It serves Kochow and the Luichow peninsula. Its chief products are sugar cane and sweet potatoes.

The French have the right under the Kwangchowwan Convention of establishing a naval port at Onpo and connecting it by railway and telegraph with Kwangchowwan; but they have not so far taken advantage of it.

There is a post office of second-class status with telegraph.

PAKHOI (see Plan)

Approximate { Latitude, 21° 28′ E. / Longitude, 109° 4′ N.

Authorities: Maritime Customs Reports; China Sea Pilot; Military Report; Liang Lan-hsün, Mttgn. des Seminars für Orient: Sprachen, Berlin, 1911.

Pakhoi, the port of the prefectural city of Limchowfu, is situated in the Gulf of Tonkin, on the north side of a peninsula which shelters a large bay from the south. It lies under a bluff, which runs down the peninsula towards Kwantau Point terminating in a range of hills about 1½ mile in length and reaching a height of 374 ft. The town is about 4 miles north-east of the Point, but the anchorage is off Ti-kok, a fishing village about half way between the two. The anchorage is sheltered from the sea in the north-east monsoon, protected by sandbanks on the N. side, but open to the south-west. It is approached by a channel about a mile wide, with depth of 3 to 3¼ fathoms abreast of Kwantau Pt., but narrowing to about half that width abreast of Ti-kok where the depth is 4 to 5 fathoms. It is further contracted here by rows of fishing-stakes which stretch out into the channel leaving a passage about 90 yds. in width marked by buoys. Indeed the whole approach to Pakhoi is encumbered by fishing-stakes which in some places extend as far as 30 to 40 miles from the coast. The tides rise about 16 ft. at springs and 11 ft. at neaps. Landing is good at high water, but only possible for small boats at low water; and as the steamer anchorage is some distance from the town, loading and discharging are liable to be impeded by rough weather. Otherwise the port is a favourable one for vessels not exceeding 17 ft. draught. A sandy spit runs across the front of the town from which it is separated by a shallow channel; and at the end of this spit is a cluster of fishermen's huts.

The town itself is long and straggling with two main streets, built on alluvial land, open to the north-east monsoon and

screened from the south by the bluff behind it. It is about $1\frac{1}{4}$ mile long. Some of the streets are paved and the principal shops are substantially built of brick ; but the town as a whole is poor, dirty, and unsanitary, though in the last respect some attempt has been made to improve matters by the employment of scavengers. Foreigners live almost entirely on the Bluff, where there is a sprinkling of European buildings. The Custom House and the foreign consulates are at the E. end of the town. Pakhoi was opened as a Treaty Port by the Chefoo Convention in 1877, and in May of that year the British Consul hoisted his flag. He was followed ten years later by the French Consul and in 1902 by the German.

The **population** was estimated in 1914 to be about 25,000 ; and the number of foreigners (exclusive of Annamese) in the district at about 70, of whom 30 were British. The consular representatives are for the most part non-resident, living at Hoihow and Hongkong.

The inhabitants of the Limchowfu district consist of Hakkas, eastern people or Swatow men, Li people from Hainan, and the boat people. The Hakkas and Cantonese do most of the commercial business, while the Swatow men are chiefly agricultural. The Li people live by agriculture and weaving, and the boating population by fishing, working cargo boats and local passenger boats and ferries. On the whole the population of the neighbourhood are rough and uneducated and inclined to turbulence and piracy.

Foreign institutions include a French free school and hospital, and an English mission hospital with two free schools, and a German free school and printing establishment. A leper asylum is attached to the English hospital ; and there are besides two Chinese hospitals.

Missions, &c.—The Kiel, Church Missionary Society, French Mission Étrangère, and American Mission have branches at Pakhoi.

Climate and Hygiene.—The climate of Pakhoi is that of Kwangtung in general with a few modifications due to its geographical situation. It is sub-tropical with long periods of heat,

of a moist and trying kind, though mitigated by sea breezes. There is practically no winter, the thermometer rarely reaching freezing-point. In fact in the early winter season the climate is exceptionally pleasant. The mean temperature for 1915 and 1916 was 74° F. : the minimum respectively 35° and 42° F. (January) and the maximum 96° and 93° F. (June). Being on the coast it has a rather high rainfall and its position is exposed to the cold north-easterly winds in winter, while the ridge on the south side of the town keeps off the southerly sea breezes in summer. Nevertheless Pakhoi is regarded as climatically a healthy place. The rainy season extends from January to June, but the rain as a rule is neither continuous nor excessively heavy. In 1910, an exceptionally dry year, the rainfall amounted to 55 in. On the other hand, in 1913 89½ in. of rain fell from May to September. The rainfall for 1915 was 62·9 in., and for 1916, 99·69 in. In 1912 the total was 71 in. for the year, which was regarded as rather above the average. From January to April heavy northerly gales blow frequently, rising suddenly and lasting sometimes three days. Typhoons occur occasionally from June to October ; and though it is stated that their centres always pass southward of Pakhoi, much damage has been done on several occasions to the crops in the district and great distress thereby caused.

In spite of some effort to improve the sanitation of the town, Pakhoi itself is on the whole dirty and unwholesome. Plague may be said to be endemic and breaks out regularly in the spring. Epidemics of diarrhoea are common in the hot weather, and cholera and small-pox are not infrequent visitors.

Surrounding country.—To the north is the shallow bay : to the south-west are a large number of villages, lying among groves of bamboo. The salient feature of the surrounding country is the ridge of hills running from Ti-kok to Kwantau Point. Three ancient forts, without guns, overlook Ti-kok.

The soil near Pakhoi is poor and barren, and in the neighbouring districts it is of indifferent quality except in the rich valleys around Lingshan. Under favourable circumstances,

however, the inhabitants can produce enough to supply their own wants and even to provide a surplus for export. Cattle are reared for agricultural uses and great numbers of pigs for food and export.

Trade and Industries.—The commercial importance of Pakhoi, which dates from the T'ai-p'ing rebellion in the middle of the nineteenth century, has steadily diminished since the opening of the West River and the treaty ports on it, Wuchow, Nanning, and Lungchow. Other adverse factors have been the development of the French communications in Tonkin and the establishment of the French station of Kwangchow-wan. From these causes Pakhoi has gradually lost the inland trade with Yunnan, Kwangsi, and the Luichow peninsula, and is reduced to catering for the limited area of its immediate hinterland. The one event which might revive the trade of Pakhoi is the building of a railway line in the district (see p. 631). The town contains about 1,000 shops, 40 or 50 of which, belonging chiefly to Cantonese, are of some importance. The industries of the district are mainly agriculture and fishing; weaving is the chief occupation of the women. The cultures are chiefly rice and ground-nuts, sweet potatoes, maize, melons, and a certain amount of sugar cane. Indigo was largely culitvated until the competition of aniline dyes almost extinguished the industry: it has, however, taken a new lease of life since the outbreak of war in 1914. The sugar cultivation varies widely, and has greatly diminished in recent years.

The **fishing fleet** numbers as many as 500 boats of 6 to 12 tons, and over 2,500 persons are engaged in this industry. The Gulf of Tonkin westward of Pakhoi is a great fishing ground, though the banks are richer nearer to the coast of Indo-China. The fish is dried and prepared at Pakhoi and sent through Yamchow to the province of Kwangsi.

The **pearl fisheries** at Pai-lung about 40 miles E. of Pakhoi were formerly of importance, and they still exist, though their productiveness is small.

The **minerals** of the district, which have been worked in

a desultory fashion, include iron near Kung-kuan, antimony at Tungking, manganese at Na-ta in the Pakiaowan district, coal of fair quality at Nientzŭping 15 miles from Yamchow, and a little gold washed in the Yamchow River. A considerable amount of salt is collected along the coast W. of Pakhoi.

The local **manufactures** are mainly concerned with first processes and no modern machinery is used. Sugar is crushed from the cane ; indigo prepared from the plant ; the fibre of hemp is separated from the stalk ; oil is pressed from ground-nuts ; silk is reeled from the cocoon ; and hides are roughly tanned. The potteries at Yamchow are of some importance ; and a large number of junks, cargo-boats, and sampans are built and launched on the beach at Pakhoi.

Shipping and Trade.—Though steam traffic has to a great extent replaced the native sailing boats, there is still a considerable volume of junk traffic with Yamchow, Onpo, Kiungchow, Kongmoon, Chanchuen, Macao, and French Indo-China. The native coasting vessels include sea-going junks of 176 to 295 tons, local junks of about 41 tons, and smaller junks ranging from 15 to 35 tons. A Chinese launch of 37 tons tows a junk of about 268 tons from Chanchuen to Yamchow calling at Hoihow and Pakhoi. The Maritime Customs Returns of shipping for 1916 show that 214 steam vessels with an aggregate tonnage of 166,662 tons entered and cleared at Pakhoi in that year, of which 140 (tonnage 138,108) were British and 50 (tonnage 7,554) were French. The number of junks according to the same returns totalled 2,684 entered and cleared, of which 2,414 were engaged in intra-district trade. The foreign trade for 1916 amounted to 1,623,134 Hk. taels for imports, and 1,364,980 Hk. taels for exports, almost all of it being with Hongkong. The chief items of export were pigs, fish (dried, salted, &c.), ground-nuts, ground-nut cake, hides, liquid indigo, white and brown sugar, earthenware, fireworks, and medicines ; while the minor items included star aniseed, leather, lungnan pulp, and minerals.

The *currency* most generally used at Pakhoi is the silver 20-cent piece. Other currency includes Mexican dollars,

Canton dollars, Hongkong dollars, Straits Settlement dollars, Indo-Chinese piastres and Japanese yen, all of which are invariably debased by repeated ' choppings '. Subsidiary coins are the silver 5-cent and 10 cent pieces, copper cents and copper ' cash '. A considerable amount of Cantonese paper money is in circulation. The value of the dollar, which before the war fluctuated between 1*s.* 9*d.* and 2*s.*, is now greatly enhanced by the recent rise in the price of silver.

The Bank of China has an agency at Pakhoi.

Supplies and Transport.—Supplies of meat and vegetables are obtainable at moderate prices. The water is unwholesome. No coal is obtainable.

Land transport consists of coolies, wheelbarrows, and clumsy carts drawn by bullocks or buffaloes.

Communications.—Pakhoi is best served by its water communications. The China Navigation Co. has two boats of 987 tons, the *Kaifong* and *Sungkiang*, running regularly between Hongkong and Haiphong and calling at Pakhoi ; a small French steamer makes a monthly trip from Haiphong ; and a regular stream of cargo steamers call at Pakhoi. Something has already been said of the native shipping, both long distance coasting, to Hainan and the Canton Delta, and local traffic to Yamchow, Limchowfu and Onpo.

The inland communications are partly by river and partly by road. The roads are for the most part in a very primitive condition and are practically useless for any wheeled traffic except wheelbarrows and the lumbering bullock-carts whose narrow wheels cut deep ruts in the wet weather. The Pakhoi plain, however, gives a good surface for light wheeled traffic ; and within the last few years a good road fit for wheeled traffic has been constructed between Pakhoi and Limchowfu and is being extended eastwards.

The two chief inland trade routes from Pakhoi run through Kwangsi towards the West River, the one by Yamchow to Nanning and the other by Watlam (Yü-lin Chou) to Wuchow. Goods are shipped on the first to Lung-mên, the port of Yamchow, thence carried by boat or on land to Yamchow, and

from Yamchow by land to Nanning. On the other goods are shipped to Limchowfu and thence by light draught boats on the Limchow River [1] to Shuenfow, the head of navigation, and then by road 30 li to Watlam. From Watlam they are carried 50 li to Paklow (or if the river is low 90 li farther to Junghsien Si) and embarked on a tributary of the West River. Both land and sea routes are rendered insecure at times by pirates and robbers, when the country is in a disturbed condition.

The Banque Industrielle de l'Indo-Chine has a concession for the building of a railway from Yamchow to Nanning and thence up the Yu-Kiang Valley to Yünnanfu (see railways, p. 160). If this scheme is completed a branch will probably be built from Yamchow to Limchowfu, greatly improving the communications of the Pakhoi district.

Telegraphic communication exists between Pakhoi and Canton and Hongkong. There is a Chinese post office, first class, with telegraph office, and a French post office at Pakhoi.

Distances from Pakhoi

		miles.	
To Limchowfu	by land	16	Route 83
Lingshan	,,	88	,, 83
Namheung	,,	108¾	,, 83
Yamchow	,,	62	,, 84

PINGHAI (See Plan)

Approximate { Latitude, 22° 37′ N. / Longitude, 114° 53′ E.

Authority: Military Report.

Pinghai (P'inghai-ssu, Hakka pronunciation; in Cantonese, Ping-hoi-ssŭ) is a small sub-district magistracy about 2 miles north of the shores of Harlem Bay. The city is very small,

[1] The Limchow River is said to be only navigable above Limchowfu for boats of any size for six weeks in the year.

being only 100 yds. by 250 yds. in area. There are four gates on the N., E., S., and W. faces. The streets and houses are small and mean, except near the West Gate where there are some large private houses. There are two large temples and some open spaces of dry ground. The city is surrounded by banyan trees which are of considerable size. The walls are some 25 ft. high and 12 ft. thick. The suburbs are chiefly on the east and south, with a small suburb on the West.

Surrounding country.—The city is almost shut in by hills, those on the north being bare and rocky ; those to the south-west and south are grassy and afford easy slopes at heights below 100 ft. Between the hills on the south and the sea the country is flat and sandy. Quarter of a mile to the east through the suburbs is a tidal lagoon, fordable in places at low tide. At high tide there is a ferry. On the east of this lagoon there are large salt pans.

There is a Commandant of Provincial Troops here who commands some 300 men scattered in bands of 12 to 20 throughout his district.

There is a postal agency.

Distances from Pinghai

		miles.	
To Titcheong	by land	9	Route 12
Pakshasunhü	,,	10	,, 13

POKLO

Approximate { Latitude, 23° 9′ N. / Longitude, 114° 28′ E.

Authority: Military Report: Ray, Geography of Kwongtung.

Poklo (Po-lo-Hsien) is a walled town situated on the right bank of the East River about twelve miles below Waichow. It is about 5 miles in circumference and appears to be prosperous. The **population** is variously given as 8,000, 15,000 and 40,000 ; and it has a dialect of its own.

There is an English Mission (London Missionary Society) on the same side of the river about ¼ mile further up with a good European house.

There are two hills about 600 ft. high to the north-east of the town with four very old guns on them.

Poklo is the seat of the district magistracy; and it has a second class post office. The proposed *Swatow–Canton Railway* will come to it.

Distances from Poklo

		miles.	
To Sheklung	by river	42½	Route 34
Waichow	,,	11¾	,, 34
Canton	,,	83¼	,, 34

PUNING

Approximate { Latitude, 23° 25′ N.
Longitude, 116° 12′ E.

Authority: Military Report.

Puning (P'u-ning Hsien: Hoklo pronunciation P'ou-ning) is a small district city at the head of a small tidal stream some 100 ft. broad and 2 ft. deep at low water, which flows into the Nam K'ai river above Kityang. The city is ½ mile above the limit of navigation of any kind on this river. It is surrounded by a wall in bad condition, with four gates. The chief suburbs are on the E. and S., and the **population** is about 10,000.

The *surrounding country* for some two miles is flat and cultivated for paddy. Beyond the paddy cultivation hills rise to heights varying from 800 to 1,200 ft. There is but little space for a camping ground in this vicinity.

The chief products of the district are sugar and fruits.

There is a postal agency.

Distances from Puning

		miles.	
To Kityang	by land	11½	Route 31
Lukfung	,,	56	,, 31

SAINAM (see Plan)

Approximate { Latitude, 23° 10′ N. / Longitude, 112° 55′ E.

Authority: Maritime Customs Report.

Sainam (Hsi-nan) is a large well-built town on the north side of the Fatshan Branch and about 3 miles east of Samshui (q. v.).

It has a population of about 40,000 to 50,000 and is a busy industrial centre with silk filatures, factories for cotton goods, and nankeens and for dyeing, flour-mills, canning factory for 'rice-birds', and an electric-light plant which supplies Samshui. It is also an entrepôt for the North River trade. There are many boats and junks on the river and a large boat population.

It is served by the *Canton–Samshui Railway*, the terminus of which is between Samshui city and Hokow, and is in launch communication with the numerous ports on the West and North Rivers and the Delta.

There is a Chinese post office of second class status.

Distances from Sainam

		miles.	
To Samshui	by rail	3·6	
Samshui	by water	3¼	Route 46
Fatshan	by rail	16½	
Fatshan	by water	18½	,, 46
Canton	by rail	27	
Canton	by water	30¾	,, 46
Samkong S.	,,	12½	,, 44
Po-tai-shui	by land	20¼	,, 45

SAMHOPA

Approximate { Latitude, 24° 21′ N.
Longitude, 116° 33′ E.

Authority: Military Report.

Samhopa (San-ho-pa) is a town situated at the junction of the Han River and the Mei Kiang, 65 miles north of Chaochowfu. There is nothing but cultivation inside the walls: but there is a busy suburb with warehouses and transhipping business. Precipitous hills flank the river on both sides; and terrace cultivation is a feature of the neighbourhood.

A regular launch service runs from here to Chaochowfu. There is a post office of second class status.

Distances from Samhopa

		miles.	
To Hohow	by water	82¼	Route 25
Kaying	,,	38¼	,, 25
Taipuhsien	,,	10	,, 27
Chaochowfu	,,	65	,, 29

SAMSHUI (see Plan)

Latitude, 23° 6′ 30″ N.
Longitude, 112° 53′ 48″ E.

Authorities: Maritime Customs Reports; China Sea Pilot.

Samshui (San-shui Hsien), is situated at the head of the Delta at the junction of the West River, North River and Fatshan Branch.

The city itself is on the rising ground three-quarters of a mile from the river front. It is roughly heptagonal in shape with imposing walls (built in 1528), about 2,000 yds. in circumference and 15 ft. high and pierced by four gates. But apart from the Court of Justice and the residences of the district magistrate and the commander of local troops, its spaces are

only half occupied by poor dwellings and one small street of provision shops. A court of justice for the NW. districts of the province was established here in 1912.

Samshui was opened as a Treaty Port in 1897, including its port of **Hokow** and the insignificant town of **Kongkun** on the opposite side of the Fatshan Creek. But the business of the district is centred in the town of **Sainam** (q. v.), three miles east of Samshui, and in Hokow.

The **harbour** at Hokow is formed by the Samshui Reach of the North River from its junction, by a small western arm, with the West River to a rock called Floating Rock (Fu-ch'ên-shih) and is about 2 miles long and from 150 to 500 yds. wide. It is bordered on the north side by the end of the tongue of land which separates the North River from the West River, by Rattler Island which splits the North River at its mouth and by Hokow harbour front. It has an (1) outer and (2) inner anchorage, the latter being barred to all vessels of more than 5 to 6 ft. draught in the dry season or when the river subsides to from 2 to 3 ft. below zero as is often the case between the middle of November and the end of April. The outer anchorage is a narrow stretch of about 750 yds. between Tweed Point and Fraser Hill, two points on the hilly ground opposite the southern end of Rattler Island. Between the two anchorages is a bar across the channel at Low Point, the SE. corner of Rattler Island.

In the spacious inner anchorage at Hokow are several small hulks for storing cargo and the pontoon landing-stage belonging to the Customs. The front at the Customs Station is bunded for 374 ft. and a stone road has been made along the river frontage in continuation of that leading to the station. The whole district of Samshui is protected along the North River and as far as Sainam by an earthen embankment, 25 ft. high, 15 ft. wide at the top and at least 50 ft. wide at the base. It runs behind the harbour buildings at Hokow. Spring tides raise the river from 2 to 3 ft. and neap tides from 1 to $1\frac{1}{2}$ ft. : and it is liable to heavy floods in wet seasons. When the season is dry, steam-launches cannot use the Fatshan channel

and do not pass Samshui. Junks, flat-bottomed and drawing less than 2 ft. laden, pass in endless procession from Canton, Fatshan, Chanchuen and towns on W. and N. Rivers.

Hokow is a place of increasing importance and a number of new shops and inns, a pawnshop, a new coal dépôt and several native boat-building yards have been erected in the last few years.

The climate of Samshui is healthier and more breezy than that of Canton and the picturesque waterways and surrounding hills, with certain facilities for sport, make it an attractive resort.

As the terminus of the Canton–Samshui Railway, and the place of meeting for many lines of boat traffic—the steamers from Hongkong and Canton, the large launch and junk traffic of the neighbouring creeks (to Canton, Fatshan, &c.), the heavy launch and junk traffic of the West River and the shallow launch and junk traffic of the North River,—it is an entrepôt of considerable importance, and, though it has little trade of its own, it is one of the most important *likin* stations in Kuangtung.

The *surrounding country* is flat but relieved by a number of low hills on the north of the city and across the harbour on the south, but it is at the gate of the picturesque and hilly districts through which the West and North Rivers flow. It is cultivated for rice, mulberry trees and sugar canes. A plant for manufacturing antimony regulus has been erected on Fraser Hill.

On the hill behind the city is a conspicuous temple and a a fine nine-storied pagoda stands behind the west end of Hokow.

Currency.—Ten-cash pieces, and 20-cent silver coins, are the most usual currency, and Canton bank notes circulate to some extent.

Shipping Returns.—The Maritime Customs returns for 1916 give 5,475 ships (1,774,080 tons) entered and cleared under General Regulations, 10,696 vessels (325,232 tons) entered and cleared under Inland Steam Navigation Rules.

Population.—The Maritime Customs Decennial Report, 1911, gave the approximate total of the population of Samshui and Hokow as 6,000. The few resident foreigners, chiefly Customs Officials, live at Hokow. The Standard Oil and Asiatic Petroleum Co., which have lighters and floating godowns in Samshui harbour, are represented by native agents. The British Consul resides in Canton ; the Belgian and Italian at Hongkong.

Communications.—The Canton–Samshui Railway (about 30 miles in length) communicates with Sainam, Fatshan and Canton. It has a single track to Fatshan and double from there to Canton. About 5 trains daily from Canton to Samshui. The station is situated between the city and Hokow front. Steamer and launch lines run to Canton, Hongkong and Macao and there is excellent communication by launch and boat through the numerous creeks with the flourishing industrial towns of the Delta. Regular launch service plies to Wuchow (118 miles) up the West River, and thence river communication is carried into Kwangsi, Kweichow and Yunnan. The shallow North River takes light-draught boats to Yingtak and Shiuchow and to the borders of Hunan.

A paved track connects the W. end of Hokow with the railway station and the South Gate of the city ; and another path leads from the South Gate past the Pagoda to the E. end of Hokow. But roads in the neighbourhood are practically non-existent, and a few stone paths along embankments are the only means of communication apart from rail and water.

There are post (second class) and telegraph offices at Samshui and Sainam. A wireless station was erected at Ma-how three miles below Kongkun on the E. bank of the West River, in 1911.

Distances from Samshui

To		miles.	
Canton	by rail	30·4	
Canton	by water (steamer route)	95½	
Canton	by water (via Fatshan)	34	Route 46

Fatshan	by rail	20.15	
Fatshan	by water	22½	Route 46
Hongkong	,,	106	
Kongmoon	,,	43½	
Sainam	,,	3¼	,, 46
Shiuchow	,,	160½	Routes 55, 56,57
Shiuhing	,,	30¼	Route 48
Szewui	,,	24½	,, 47
Takhing	,,	86¾	,, 48
Tsingyün	,,	51½	,, 55
Waitsap	,,	89	,, 47
Wongshek	,,	75½	,, 55
Wuchow	,,	133½	,, 48
Yingtak	,,	99	Routes 55, 56

SAMTOHÜ

Approximate { Latitude, 23° 7′ N. / Longitude, 114° 55′ E.

Authority: Military Report.

Samtohü (San-to-hsü), usually called Sam-tou-chuk, is a large market village on a spur overlooking the river of the same name. It is approximately 500 yds. by 200 yds. in size. The streets and houses are in fair condition and the place is prosperous, forming, as it does, the highest point navigable for large junks on this branch of the East River.

The *surrounding country* is flat and under dry cultivation. Direct access to the town is hindered on the western side by the river, and on the northern side by a small creek. The creek is well bridged and its depth would never exceed three feet.

There is a postal agency.

Distances from Samtohü

		miles.	
To Hoifung	by land	32½	Route 16
Waichow	by water	63¾	,, 17

SHEKKI

Approximate { Latitude, 22° 21′ N.
Longitude, 113° 30′ E

Authorities: Maritime Customs Reports; China Sea Pilot.

Shekki (Shih Ch'i) or Heungshan City is a well-built city of 70,000 inhabitants on the Shekki (or Nemesis) Creek, about equidistant from Kongmoon and Macao. It is situated on the north-west edge of Heung-shan Island. It has a large trade with Hongkong and Macao in fresh vegetables and with Chinese ports in salt fish and olive oil. The olive tree is largely grown in the neighbourhood. It is noted for its excellent vernacular schools.

There are three mission schools—one for boys belonging to the Canadian Presbyterian Mission and two for girls belonging to the Church Missionary Society.

It has a post office (second-class); and there is an electric lighting plant. A line of fast towing launches runs to Hongkong.

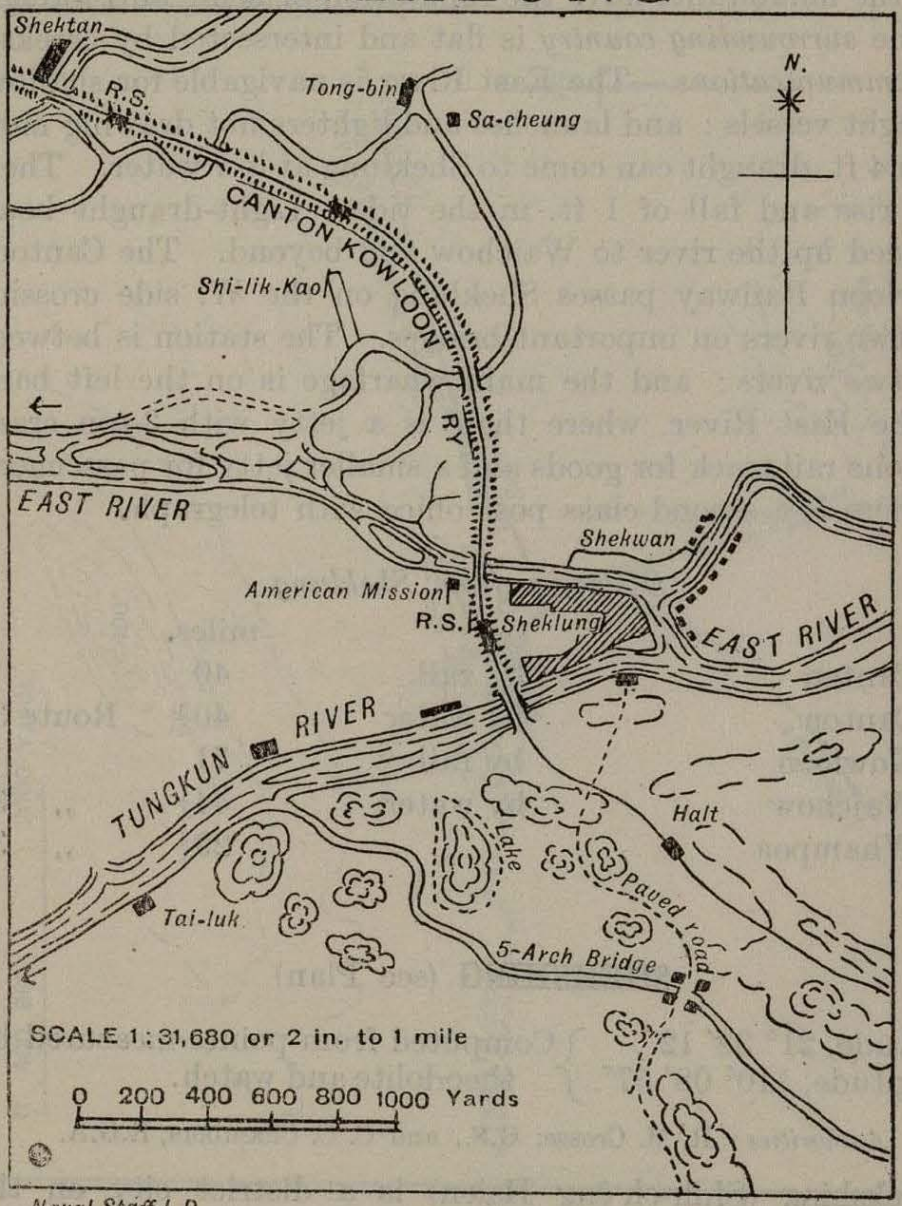
SHEKLUNG (see Plan)

Approximate { Latitude, 23° 6′ 28″ N.
Longitude, 113° 52′ 12″ E.

Authorities: Military Report; China Sea Pilot; Henry, Lingnam.

Sheklung (Shih-lung) at the head of the East River Delta and at the junction of the Tungkun River with the East River is a large town and has been a busy mart from time immemorial. It serves as entrepôt for foreign goods a great part of the Waichow prefecture besides Tungkun and other neighbouring districts of the Kwangchow prefecture. The number of inhabitants is variously given as 60,000 and 100,000. It is the centre of the sugar trade and has large refineries, besides manufactures of tin goods and rough pottery. It also exports groundnut oil. It has now an electric light plant.

SHEKLUNG



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Missions.—The American Presbyterian Mission (Northern) has a branch here and there is also a Roman Catholic Mission ; but the inhabitants have the reputation of being anti-foreign.

The *surrounding country* is flat and intersected by creeks.

Communications.—The East River is navigable for shallow-draught vessels : and launches and lighters not drawing more than 4 ft. draught can come to Sheklung at low water. There is a rise and fall of 1 ft. in the tide. Light-draught boats proceed up the river to Waichow and beyond. The Canton–Kowloon Railway passes Sheklung on the W. side crossing the two rivers on important bridges. The station is between the two rivers ; and the main wharfage is on the left bank of the East River, where there is a jetty with 3-ton crane and one rail track for goods and a smaller jetty for passengers.

There is a second-class post office with telegraph.

Distances from Sheklung

		miles.	
To Canton	by rail	40	
Canton	by water	40¾	Route 34
Kowloon	by rail	71	
Waichow	by water	44¼	,, 34
Whampoa	,,	29¾	,, 34

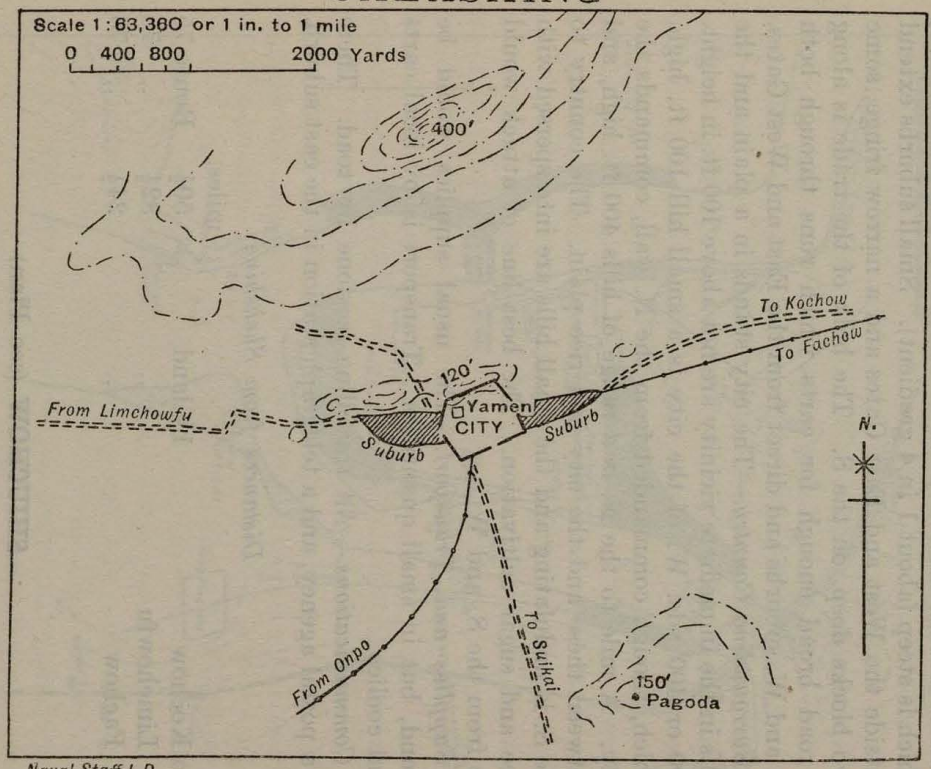
SHEKSHING (see Plan)

Latitude, 21° 38′ 12″. } Computed from points measured by
Longitude, 110° 08′ 57″. } theodolite and watch.

Authorities : R. M. Crosse, G.S., and C. C. Chambers, R.G.A.

Shekshing (Shih-ch'êng Hsien) is a district city on the right bank of a small stream which flows from the east into the Kap-shui River. It is rectangular in shape and the N. wall is built over a hill about 100 ft. high. The walls are 30 ft. high and 2 ft. thick at the top with a berm 8 ft. broad. They are crenellated ; and obsolete cannon are mounted at the north-east and north-west corners. There are 3 gates,

SHEKSHING



Naval Staff I.D

SS 2

East, West, and South, protected by bastions of the same nature as the wall. There is no moat. The interior is well built over with the exception of the side of the enclosed hill, which is steep (about 1 in 4 gradient). Small suburbs extend outside the West and East Gates and a narrow fringe, some two blocks deep, on the S. The bulk of the trade is along a road broad enough for carts which runs through both E. and W. suburbs and direct from the East and West Gates.

Surrounding Country.—The city stands in a plain and the hills in the immediate vicinity are not above 100 ft. in height. 300 or 400 yds. W. of the city is a small hill 100 ft. high, which, though commanded from the N. wall, commands the city. A mile to the N. is a range of hills 400 ft. high, and between these and the city is a rice plain. The country to the S. is undulating and the small hills are interspersed with rice and sugar cultivation. The best line of attack would be from the S. and W.

Supplies and Transport.—The usual supplies would be found, but in small quantities. Transport is by local carts and coolies.

Communications.—All travelling is done by road. There is a postal agency, and a telegraph station in the east suburb.

Distances from Shekshing

		miles.	
To Kochow	by land	50½	Route 75
Limchowfu	,,	82½	,, 75
Fachow	,,	24½	,, 75

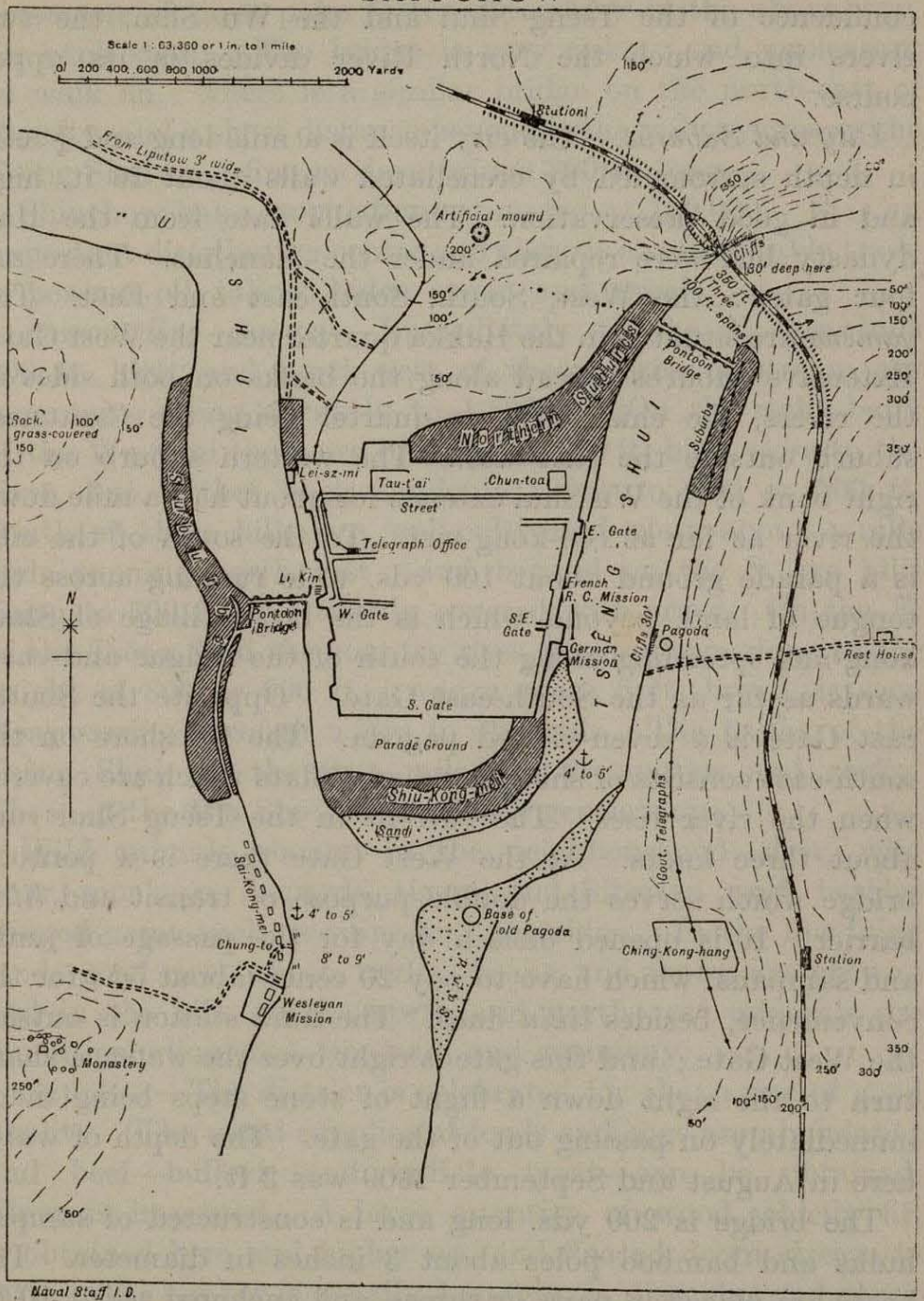
SHIUCHOW (see Plan)

Approximate { Latitude, 24° 51′ 55″ N.
Longitude, 113° 09′ E.

Authorities: Military Report; Madrolle, Chine du Sud.

Shiuchow (Shao-chou Fu) often called Shiu-kuan from the name of the old district magistracy in which the city lies,

SHIUCHOW



Naval Staff I. D.

is an important prefectural city on a tongue of land at the confluence of the Tsêng Shui and the Wu Shui, the two rivers into which the North River divides in its upper course.

City and Suburbs.—The city itself is a mile long and ¾ mile in depth surrounded by crenellated walls about 26 ft. high and in good preservation. The walls date from the Han dynasty but were repaired under the Manchus. There are four gates: the West, South, South-east and East. The *yamêns* are situated in the Hakka quarter near the West Gate. Extensive suburbs spread along the banks on both sides of the rivers, the chief business quarter being the Cantonese suburb outside the east wall. The western suburb on the right bank of the Wu Shui extends for about half a mile down the river as far as Sai-kong-mei. To the south of the city is a parade ground about 100 yds. wide running across the tongue of land, beyond which is the large village of Shiu-kong-mei spreading along the south of the tongue and eastwards as far as the South-east Gate. Opposite the South-east Gate is a seven-storied pagoda. The foreshore on the south-east consists of shingle and sand flats which are covered when the river rises. The current in the Tsêng Shui runs about three knots. At the West Gate there is a pontoon bridge which serves the double purpose of transit and *likin* barrier. It is opened once a day for the passage of junks and sampans, which have to pay 20 cents (about 5*d.*) for the convenience, besides *likin* dues. The *likin* station is outside the West Gate; and this gate is right over the water, a sharp turn to the right down a flight of stone steps being made immediately on passing out of the gate. The depth of water here in August and September 1909 was 2 ft.

The bridge is 200 yds. long and is constructed of sampan hulks and bamboo poles about 3 inches in diameter. The boats are placed in pairs or threes, and anchored about 10 ft. apart. Across these boats about 18 poles are placed at right angles to the boats' keels, and these poles are joined in threes by transverse wooden ties passing through holes in

the ends of the poles. The 10-ft. spans are completed by three sets of three poles fastened together in the above way, for each span. The bridge is very rickety and unpleasant to walk on. There is a similar bridge on the north-east of the city, and a short distance beyond it the railway crosses the Tsêng Shui on a fine modern bridge 800 ft. long.

Shiuchow has a **population** estimated at 100,000. It is an important distributing centre and there is a considerable trade in pea-nut oil, tallow, hides, sugar, and cereals.

Surrounding country.—Immediately to the N. are hills 200 ft. high, and north-west of these across a stream are mountains rising abruptly to 1,500 ft. On the right bank of the Wu Shui there are rocky hills, 200 ft. high, close to the river, but farther back suddenly rising to 400 or 500 ft. South of these hills is a well-cultivated plain about a mile wide running north-west; and beyond on the S. are hills rising to 500 ft. and thickly covered with grass. On the E. of the Tsêng Shui the country rises at a uniform slope to the height of 800 or 900 ft.; and a road, 5 ft. broad, is seen disappearing through a dip in the hills. The banks of the Tsêng Shui for the first mile are precipitous and rocky. Those of the Wu Shui have a fairly gentle slope.

Wild animals abound in the neighbourhood—deer, wild boar, monkeys, leopards, tigers, and Siberian wolf, besides winged game such as snipe and partridge. In the low-lying lands good rice, wheat, barley, beans, and maize are grown; and in the hills to the north and north-west minerals are found including coal, tin, lead, and antimony.

Supplies.—The district is celebrated for cheap rice of good quality. The usual supplies of fowls and eggs are abundant; and beef—bullock and buffalo meat—can be obtained. Flour is imported. A large quantity of wood, chiefly fir, is obtained here and higher up, and floated down stream in rafts. The timber is usually 4 to 6 in. in diameter and about 12 to 15 ft. long, and the logs are made up into unwieldy rafts 600 ft. long and 100 ft. or more wide causing much obstruction in the river.

Camping-grounds.—Good camping-grounds exist both on the E. of the river, and to the south-west on the hills near Sai-kong-mei where there are natural wells. A small camp might be formed on the S. parade ground if the city had been occupied. The hills N. of the city are not recommended.

Missions.—The English Wesleyan Mission at Sai-kong-mei consists of a two-storied bungalow in about two acres of ground surrounded by a high wall. There is a medical mission attached and a mission room in the city. There is a German Mission outside the South-east Gate ; and a French Roman Catholic Mission within the walls near the East Gate.

Climate. The climate is hot in summer ; and owing to the sudden changes of temperature caused by the alternating north and south winds it is unhealthy for foreigners. The winter is comparatively cold, frost and snow being of frequent occurrence.

Communications.—The *Yüeh-Han Railway* connects Shiuchow and Canton and the line is completed 15 miles beyond the city. The station lies south-east of the city about a mile from the river confluence. There is no launch communication and goods are carried by river on junks similar to those described on p. 69. Junks ascend the Wu Shui as far as Lokchong. The principal trade routes from south to north have run for centuries through Shiuchow into Hunan and into Kiangsi over the Mei-ling Pass ; but in future the railway is likely to absorb most of the trade.

There is a telegraph office within the city to N. of the West Gate, and there is a Chinese post office of second-class status.

Distances from Shiuchow

		miles.	
To Yingtak	by water	61½	Route 57
Yingtak	by land	58¼	,, 58
Yingtak	by rail	53·2	
Samshui	by water	160½	Routes 55, 56, 57
Canton	by land and water	172¼	,, 54, 56, 57
Canton	by rail	139·29	

Lokchong	by water	35	Route 61
Pingshek	,,	75	Routes 61, 62
Ichang Hun	by land and water	87	,, 61, 62, 63
Yüyüan	by land	28½	Route 64
Namyung	,,	71¾	,, 59
Nananfu	,,	96	Routes 59, 60

SHIUHING

Approximate { Latitude, 23° 5′ N. / Longitude, 112° 7′ E.

Authorities: Maritime Customs Reports; China Sea Pilot.

Shiuhing (Shao-ch'ing Fu) is situated on the left bank of the West River about 26 miles above Samshui. It is a port of call for steamers. The walls, which measure about 1½ mile in length and 30 ft. in height, were built at the beginning of the twelfth century. Its literary name is Tuan-chow and it was formerly the capital of the province. The **population** is said to have been 200,000 in the past, but since the devastation of the T'ai-p'ing rebellion it has been relatively small and is variously estimated at 20,000 and 80,000. The city lies in a flat plain between two river gorges and the suburbs spread along the river for 2½ miles. The town is clean and well-ordered with good streets. It is chiefly residential, but as a distributing centre for the Hokshan and Loting districts it has some trade in tea, pottery and marble, tobacco, bamboo ware, linen goods, straw-bags, matting, and carved steatite. There is an electric lighting company. Iron-ore is mined at Kongku. Shiuhing is a military station.

Communications.—The river is about a mile wide opposite the city with a depth of at least 4 fathoms on the left side. The tide is felt in the winter, but in the high-water season in summer the river sometimes rises 40 ft. There is a good landing-place with wide stone steps. A good road runs along the river embankment to Samshui.

Missions.—Baptist, Church of England, and Roman Catholic Missions are installed here.

Supplies.—Provisions are scarce and no meat is to be obtained.

There is a post office (second-class) with telegraph.

Distances from Shiuhing

		miles.	
To Samshui	by water	30½	Route 48
Takhing	,,	56¼	,, 48
Wuchow	,,	103	,, 48
Sunhing	by land	39	,, 70
Mashui	,,	106	,, 70
Yeungchun	,,	99½	,, 70

SHUITUNG

Approximate { Latitude, 21° 29′ 02″ N.
Longitude, 110° 56′ 46·5″ E.

Authorities: China Sea Pilot; Ray, Geography of Kwontung.

Shuitung is the port of Kochow from which it is separated by 35 miles of grassy uplands over which wheelbarrows and coolies carry merchandise to and fro. It is in direct communication with Kongmoon, the Custom's Regulations not permitting the entry of boats which have not first visited that port or Lappa. In spite of this hindrance and the shifting sandbanks in the harbour entrance, there is a big export trade in cattle, pigs, poultry, salt, sugar, and hemp. About 100 junks monthly enter the harbour. The entrance to the harbour is narrow and dangerous: the outer bar, on which there is 6 ft. of water at low tide, is 6 miles east of An-kang Shan. The banks by the bar shift during strong winds and the sea breaks heavily on them. The coast is flat; and between the harbour entrance and An-kang Shan is

a peninsula with two remarkable conical hills. A narrow channel between mud banks leads to Shuitung 5 miles up.

There is a post office of second-class status with telegraph.

Distances from Shuitung

		miles.	
To Kochow	by land	35	Route 74
Tinpak	,,	21¼	,, 72
Ngchünyün	,,	26	,, 72
Yeungkong	,,	77	,, 72

SHUMCHÜN (see Plan)

Approximate { Latitude, 22° 34′ N. / Longitude, 114° 8′ E.

Authority: Maritime Customs Reports.

Shumchün (Shên-ch'uan), also known as *Lo-un*, is a populous and growing market town. It is the frontier station of the *Canton–Kowloon Railway* where the line crosses from British to Chinese territory. There is a Native Customs Office. It is a walled town, and outside the W. gate is a brick and stone building which was intended for a hospital, but has not been fitted up. It has been occupied by soldiers. Sugar is manufactured by native processes about the town.

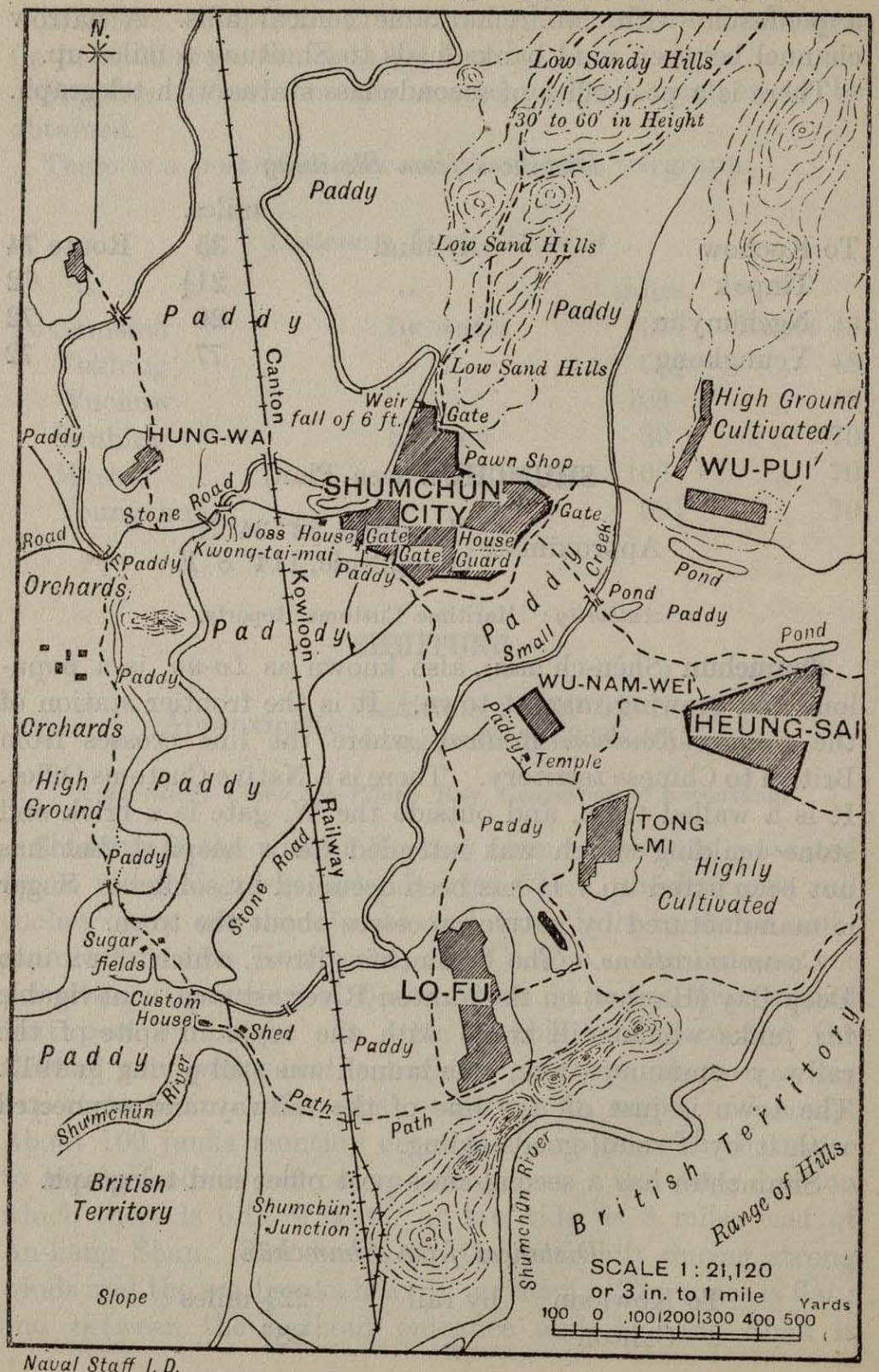
Communications.—The Shumchün River, which flows into Deep Bay (Hauhoi) on the Canton River estuary, is navigable for junks which still trade with the town in spite of the railway communication; one launch was still plying in 1913. The town is just off the line of the railway and connected with it by a small goods siding.

Shumchün has a second-class post office and telegraph.

Distances from Shumchün

To Kowloon	by rail	22¼ miles
Canton	,,	88¾ ,,

SHUMCHÜN & ENVIRONS



Naval Staff I. D.

SHUNTAK : see Taileung

SUIKAI

Approximate { Latitude, 21° 24′ N.
Longitude, 110° 13′ E.

Authorities : Madrolle, Chine du Sud ; F. Hirth, 'The Peninsula of Lei-chou,' China Review, vol. ii, 1874.

Suikai (Sui-ch'i-hsien) is a small district city in the north of the Luichow peninsula. Its trace is circular and the walls are of brick about 15 ft. high with crenellated top, and 1,400 yds. long, with three gates. They were built in 1374 and restored about 1700. The houses are described as small and low, and the public buildings as strongly built and of brick. There are many ponds within the walls, and in the centre of the town is a lofty pagoda which forms a conspicuous landmark. Near the North Gate is a temple of Confucius. An extensive suburb stretches SE. from the East Gate. The surrounding country is rolling plain, and the immediate neighbourhood is laid out in fields. Much fruit (especially peaches) and vegetables are grown.

The French leased territory of Kwangchowwan lies about 12 miles SE. of Suikai ; and a branch of the Matshe or Montao River, which flows into Kwangchowwan Bay, flows past the city, but it is only navigable for sampans above Montao on the main stream.

There is a postal agency and telegraph office.

Distances from Suikai

		miles.	
To Fachow	by land	31	Route 78
Che-kam	,,	12¾	,, 79
Hoi-tow	,,	18	,, 79
Ko-voui	,,	28½	,, 77
Luichow	,,	37	,, 76

SUNCHONG

Approximate { Latitude, 22° 13′ N. / Longitude, 112° 29′ E.

Authorities : Maritime Customs Reports ; Ray, Geography of Kwongtung.

Sunchong (Hsin-ch'ang), with the adjoining Cheungsha and Tikhoi, is the trade centre for the Hoiping and Yanping districts, besides supplying the upper half of Sunning. It is situated on the Tam-kong or Sunchong River about 29 miles from its mouth, at its point of junction with the Sunning River ; and it has a **population** of about 25,000.

Communications.—The Sunchong River is a fine waterway with plenty of depth up to Sunchong, above which it divides into several shallow branches not navigable for vessels of deep draught. Trading junks from Hongkong pass up as far as Sunchong. In the high-water season larger vessels can go up as far as Kungyifow, six miles below Sunchong.

It has a post office (second-class) and telegraph.

Distances from Sunchong

		miles.	
To Kongmoon	by water	39	Route 53
Chikhom	,,	4	,, 53
Yanping	,,	26	,, 53
Yeungkong	by land and water	66	,, 53

SUNHING

Approximate { Latitude, 22° 50′ N. / Longitude, 112° E.

Authorities : Henry, Lingnam ; Madrolle, Chine du Sud.

Sunhing (Hsin-hsing Hsien) is situated on the right bank of the Sunhing River about 39 miles south-west of Shiuhing. Its walls, built in 1130, are about 3 miles in length with 5 gates.

The town is situated in the centre of a great rice plain.

The Sunhing River is a tributary which joins the right side of the West River just below Shiuhing. It is navigable for small craft as far as Hotowhü, about 20 miles above Sunhing and a place where a considerable boat-building industry exists. This head of navigation is only separated by a few miles from the upper waters of the Mok-yeung River on which Yeungkong is situated.

There is a Chinese post office of third-class status at Sunhing.

Distances from Sunhing

		miles.	
To Shiuhing	by land	39	Route 70
Mashui	,,	67	,, 70
Yeungchun	,,	60½	,, 70

SUNNING

Approximate { Latitude, 22° 13′ 44·5″ N.
Longitude, 112° 39′ 10″ E.

Authorities: Official Guide; Maritime Customs Reports.

Sunning (Hsin-ning Hsien) a district town in the prefecture of Canton, and situated on a small affluent of the Sunchong River, has a wall about one mile in length with three gates and a moat 10 ft. wide. The walls date from the early years of the sixteenth century. The station on the Sunning Railway is outside the E. gate in a prosperous business suburb, and the locality is a favourite one for wealthy Chinese returning from America.

Communications.—By means of the railway it has communication with the port of Samgaphoi on an arm of the sea and with Kongmoon and the West River.

It has a second-class post office.

Distances from Sunning

To Kungyifow	by rail	15 miles
Towshan	,,	21 ,,
Kongmoon	,,	45 ,,

SUNWUI

Approximate { Latitude, 22° 26′ N.
Longitude, 113° 1′ E.

Authorities: Maritime Customs Reports; Henry, Lingnam; Madrolle, Chine du Sud; Ray, Geography of Kwongtung.

At the south end of the Kongmoon creek on the west bank just above the mouth of the Tamkong River lies the district city of Sunwui (Hsin-hui Hsien), about 8 miles distant from Kongmoon.

Its walls, about 3 miles in circumference and about 20 ft. high and pierced by 4 gates, are of ancient date but rebuilt, enlarged, and surrounded by a double moat in the Ming dynasty. They are now overgrown with fern and grass.

Sunwui is the largest city of its class in the province and the **population** has been estimated (Henry) at 250,000, but this is probably an overstatement. The figure of 70,000 (H. W. Ray) is probably nearer the mark. It is the centre of the fan trade, lying within a district (roughly 20 miles E. to W. and 10 miles N. to S.) which is peculiarly suitable for the cultivation of fan-palms. Another industry of the neighbourhood is the making of fine grass-linen in hand-looms; and the district is noted for its fine oranges and papayas.

NNE. of the city is a group of mountains, on which are two temples. The principal peaks are the Sceptre peak (Kwei-fung) and Cloud peak (Wan-fung).

Missions.—The Wesleyans and Presbyterians have long had missions here, and the Berlin Mission has a girls' school. The best native school in the district is at Sunwui, housed in a European-built structure.

The *Sunning Railway* passes the NW. side of the city, and there is a good paved road to Kongmoon.

Sunwui is the seat of the district magistrate and contains the local gaols.

There is a post office (second-class).

Distances from Sunwui

		miles.	
To Kongmoon	by rail	5	
Kungyifow	,,	24.7	
Kungyifow	by water	25	Route 53
Kongmoon	,,	8	,, 53
Sunchong	,,	31	,, 53
Yeungkong	by land and water	97	,, 53

SUNYI

Approximate { Latitude, 22° 9′ E.
Longitude, 110° 37′ E.

Authority : Ray, Geography of Kwongtung.

Sunyi (Hsin-i Hsien) is a district city on the Kochow River about 30 miles above Kochow. With its market of Chen-lung it supplies the northern and more mountainous part of the prefecture with foreign goods through the medium of Kochow and Lotingchow runners. It is said that gold exists in the neighbourhood and is obtained by washing from the river.

SÜWENYUN

Approximate { Latitude, 20° 23′ N.
Longitude, 110° 5′ E.

Authorities : Ray, Geography of Kwongtung ; China Sea Pilot.

Süwenyun (Hsü-wên Hsien ; locally Chuiman) is a district town in the south of the Luichow peninsula on the right bank of a river which flows into Hai-an bay past the village of Hai-an at the mouth. The walls of the town are about 2 miles long and 18 ft. high ; and the **population** is said to be about 6,000. It is an important Buddhist centre ; and has some trade with Kwangchowwan and Hainan. On the hills south of the town is the Shenwen pagoda, 385 ft. above the

sea ; and there was formerly a wireless station communicating with Hoihow. On the E. side of Hai-an bay is Pak-she village and fort.

There is a postal agency with telegraph.

Distances from Süwenyun

		miles.	
To Pak-chong	by land	8½	Route 76
Luichow	,,	42	,, 76
Suikai	,,	77½	,, 76

SWABUE

Approximate { Latitude, 22° 45′ 58″ N. / Longitude, 115° 21′ 16″ E.

Authorities : Military Report : Maritime Customs Report.

Swabue (Shan-wei), situated at the head of the northern arm of the Tai-sami inlet, is a market town, about ¼ mile from which is the small walled town of K'am-ê. The latter measures about 100 by 200 yds., but Swabue extends some ¾ mile from N. to S. It is a prosperous place, fishing and salt-evaporating being the chief industries. The export of wolfram from this neighbourhood began in 1917. The harbour is full of junks, numbering about 200.

Surrounding country.—Running for about 6 to 8 miles to the N. is a range of hills 2 to 3 miles distant, making an excellent line of defence. The hills are bare and easy to climb. To the W. there are 5 miles of beach with sandy ground behind.

Missions.—There are a French and an English Presbyterian mission station, the latter having a hospital of 60 beds and good appliances.

Supplies.—Supplies such as rice, eggs, kerosene, firewood, and fish can be obtained.

Communications.—A launch runs from Hongkong to Ngotow and returns the next day via Pakshasunhü : another

runs from Hongkong at 5 a.m. to Swabue via Pinghai and Makung arriving at Swabue at 5 p.m. every day: another runs from Swatow to Swabue about every four days in fine weather. Maritime Customs Returns 1912 stated that there were 4 steamers running regularly between Sanmen and Swabue along the coast, which were reported to be doing well in spite of keen competition. A sandbar compels launches to make a long détour but junks sail in quite close to the south headland.

There is a post office of second-class status.

Distances from Swabue

		miles.	
To Hoifung	by land	15	Route 9
Makung	,,	10½	,, 10

SWATOW (see Plan)

Approximate { Latitude, 23° 21′ N. / Longitude, 116° 40′ E.

Authorities: Maritime Customs Reports; Military Report; Official Guide; China Sea Pilot.

Swatow (Shan-t'ou) is a commercial town of considerable importance, as the port of the prefectural city of Chaochowfu and the centre of distribution for a large and populous district. It is situated on the estuary of two large rivers—the Han Kiang and the Kityang River—and it has a fine harbour, a mile wide and 20 to 40 ft. deep at high tide. The entrance to the estuary is blocked by two islands, Double Island and Sugar Loaf Island (the former about 6 miles E. of the town), which leave a narrow and somewhat dangerous approach, especially dangerous at night and in foggy weather.

Harbour.—The harbour limits are (1) lines drawn N. and S. through the eastern extreme of Sugar Loaf Island on the E., and (2) a line drawn N. from Ta-tau Pt., the next point to Go-chang Pt., on the W.

The usual anchorage for steamers is off Swatow, but on the approach of a typhoon vessels generally move to a point to the south-west of Fort Kilu where the holding ground is better than in other parts of the harbour, and the typhoon can be ridden out in safety. Swatow can be reached at high water during the NE. monsoon (October to March) by vessels drawing 22½ ft. and 21 ft. at springs and neaps respectively; during the south-west monsoon (April to September) by vessels drawing 21½ ft. and 20 ft. at springs and neaps respectively. The tide in the harbour runs very swiftly, attaining a speed of from 4 to 5 knots. During the summer, when the prevailing wind is from the W., the tide only floods for two or three hours a day, and for a large portion of the day the boat harbour on the Swatow side is dry.

Between Double Island and the anchorage off Swatow are numerous rows of fishing-stakes, some of which greatly impede navigation at night. In daylight they form a good guide to the main channel inside the harbour, as they are placed in deep water. Buoys are frequently placed to mark the fishing-nets near the stakes of the south-west point of Double Island. A white light is usually exhibited from the outer stake, but these lights are unreliable. There are no barriers in the river. The western end of the harbour is very shallow.

On the Swatow side of the river are nine jetties with pontoons. Steamers drawing up to 22 ft. can come alongside the six jetties on the E., though sometimes they are liable to take ground at low water. The central group of four jetties belongs to Butterfield & Swire (3) and Jardine Matheson (1). The three on the west are launch jetties. There are in addition two jetties belonging to the Asiatic Petroleum and Standard Oil Companies. These can be used by steamers, but can only communicate with the shore by boat. Owing to the silting up of the river front it has been necessary on two occasions to move some of the landing hulks out into the stream.

There are three boat jetties at Kak-chio, on the opposite side of the harbour. That on the W. can be used at any tide.

That on the E. could not be used at all states of the tide, but an extension was to be built in 1912 and is probably now completed. The centre jetty is not now used.

For landing-place at Hope Bay and approach from there see p. 237.

The *town* itself is built on alluvial and partly reclaimed land on one of the mouths of the Han River. Its general form is fan-shaped with the main streets radiating like the ribs of a fan towards the harbour front. This part is a scene of great activity; but the inland portions of the town are only an insignificant collection of houses, a few shops where pewter is beaten and here and there a temple or a guild hall. The streets are narrow and uneven and unfit for ricksha traffic except on the broad macadamized road along the front and that between the town and the railway station. East of the town is a large stretch of shallow water and mud which is gradually being reclaimed; and the work of reclamation is going on W. and N. of the town.

Swatow was opened to foreign trade by the Treaty of Tientsin in 1858; but owing to anti-foreign feeling it was practically inaccessible for several years. The earliest foreign trade, that in opium, was carried on from the island of Namoa, north-east of Swatow; and subsequently foreign traders settled on Double Island (Ma-su). In 1861 the British established a consulate at Kak-chio, opposite to Swatow across the harbour, and foreign steamship companies gradually established themselves in Swatow itself.

There is no definite foreign concession, but Kak-chio and the suburb of Kialat (E. of the town) have been adopted as convenient places of residence by foreigners. The foreign community has no municipal organization.

Kialat which is the residential quarter of Swatow lies along the water and is served by the Ma-lo, a macadamized road from Swatow harbour. Here are the French, Norwegian, Japanese and German consulates, the German post office, besides churches, schools, clubs, &c.

Kak-chio, across the harbour, is virtually an island, being

cut off on the landside by the narrow Tathowfow Creek, which gives access to the Han River from the sea, three miles above Swatow. It lies in a small bay about a mile wide at the foot of a picturesque hill system of which the highest point—Mt. Beatty—rises to 697 ft. The hills are composed of granite boulders with seams of disintegrated granite. The action of the rain has in places washed away the latter, leaving deep fissures and ravines, which would render any movement of troops extremely difficult. The front is bunded. The British and American consuls and the commissioner of works reside here ; and there is the British post office, a sugar refinery, the Kak-chio hospital and the Swatow church.

The water-supply at Kak-chio is obtained from a good spring just behind Bradley & Co.'s godowns, which has never yet run dry. This water is used for making ice and soda-water. There are besides several wells which are usually sufficient for the needs of the community except during a very dry season ; and there is a reservoir for rainwater behind the sugar refinery belonging to Jardine, Matheson & Co. The deep part of this reservoir is 8 ft. deep, 40 yds. long and 30 yds. broad. The overflow basin is $1\frac{1}{2}$ ft. deep with a surface of 300 sq. yds.

Swatow itself now has an efficient water supply with reservoirs at Kia-kun on the Han River, 8 miles above the town. The **population** was estimated in 1911 according to Maritime Customs reports as 65,800 ; but other estimates place it at 50,000 and even as low as 30,000. It includes Hakkas, Hoklos or Swatow Chinese, and some Cantonese, forming three very distinct and antagonistic elements. The Swatow dialect (also called the Tie-chiu dialect) is current along the coast for about 140 miles and spreads 40 to 60 miles inland in the eastern portion of Kwangtung. There are a number of foreigners, the majority being Japanese who are mostly engaged in retail trade. The British in the consular district were said to number 221 in 1915. The total number of foreign residents in 1912 was computed at 475.

The *missions* at Swatow are the Missions Étrangères de

Paris, the Basel Mission, the English Presbyterian Mission, which has a hospital with accommodation for 300 patients in Kialat, and the American Baptist Union which has a hospital with accommodation for 100 patients at Kak-chio. The last named has also a college and seminary; and there is an Anglo-Chinese college at the end of the Ma-lo E. of Kialat. There are numerous Chinese schools. There is a leper hospital in Kialat.

Hygiene.—Swatow has a Health Board which keeps the streets and houses clean from garbage and attends to quarantine and other precautionary measures. On the whole it is a healthy town, though not free from bubonic plague and cholera.

Surrounding country and local industries.—Though much of the surrounding country consists of low, barren hills with sparse growth of wire grass and stunted trees, the delta of Han River has a productive, though light, soil producing two crops of rice, in July and November. Other cereals and potatoes are also cultivated and sugar cane is one of the most important crops of the district. The low lying districts are intersected by numerous broad and shallow creeks; and the irrigation of the fields is effected by water wheels which raise the water from canals to the higher level of the fields. Nearly all these water wheels are movable and can be carried about and set up where they are wanted. The wheels are all worked by coolies who turn them with their feet like a treadmill.

Oranges, indigo, ground-nuts, tobacco and hemp are produced on a considerable scale. The farmers keep oxen, buffaloes, sheep, pigs and poultry. The coastal population is mainly engaged in fishing; and quantities of dried fish and oysters are exported.

An important local industry is the weaving of grass-cloth—a name given to a cloth woven from ramie, hemp or pineapple fibre, or from a mixture of any two or of the whole of these three materials. It varies much in quality. The ramie or white nettle is extensively cultivated on the plateaux north of Kityang. Ramie and hemp thread and twine are also largely used in the manufacture of fishing nets.

Other local industries include rice-mills, flour-mills, bean-cake factories, soap-manufacture, cotton weaving, drawn-thread work, and hosiery making. There is an electric-lighting company; and a ricksha company with about 400 rickshas. A company was formed in 1916 to work coal mines at Meihsien, but with what success is not yet clear. Wolfram has been found in several districts in East Kwangtung, the principal locality being in the Wuhua district; other wolfram deposits exist in the Hoifung, Lukfung, Puning and Kityang districts.

Trade.—The commerce of the town is largely controlled by powerful trade guilds, which have branches in many parts of China. The principal articles of export are sugar, rice, tea, oranges, nankeens, grass-cloth, pottery, and the paper which is brought down the Han River in special junks (*liu-p'êng-ch'uan*) from Fukien. There is a considerable inland trade with the Waichow district; and the sea trade is chiefly with Hongkong, Indo-China, Siam, the Straits Settlements, East Indies, South China coast, Lower Yangtse and Japan.

A large number of emigrants leave the district for the Straits Settlements, Siam, Dutch East Indies and Cochin China, as many as 150,000 leaving and 120,000 returning in one year. The transport of these emigrants and of the goods which they require employs a great deal of shipping in which English, Dutch, Norwegian, Chinese and Japanese companies are engaged. There is besides a large junk and launch traffic on the rivers and along the coast.

The net value of the trade of the port in 1916 was 58,529,443 Hk. Tls., of which foreign imports represented 14,628,485 Hk. Tls.

The shipping returns for 1916 from the Maritime Customs Trade Reports were:

(1) Under General Regulations.

Entered and cleared, 2,203 steamers of 2,676,311 tonnage.

(2) Under Inland Steam Navigation Rules.

Entered and cleared, 11,603 vessels of 423,281 tonnage.

(3) At the Native Customs.

Entered and cleared, 44,273 junks of 928,395 tonnage.

Of (1) 1,520 vessels with a tonnage of 1,907,601 sailed under the British flag ;

Of (2) 1,348 vessels with a tonnage of 49,662 sailed under the British flag ;

and 7,813 vessels with a tonnage of 297,683 sailed under the Chinese flag ; the remainder carrying the French flag.

The *currency* used at Swatow chiefly consists of Mexican dollars, Hongkong dollars and Japanese *yen*, besides Saigon and Straits Settlement dollars : 10- and 20-cent silver pieces of the Kwangtung mint and 50-cent Hongkong pieces : and copper cents of the Kwangtung mint. Notes of the Kwangtung Government, and silver notes of the Hongkong and Shanghai Bank and the Bank of Taiwan : besides silver notes of the important Swatow silver houses with the value of 1 to 1,000 dollars circulate in the district.

Banks.—Bradley & Co. represent the Hongkong and Shanghai Banking Corporation, the Mercantile Bank of India and the Imperial Bank of China : Butterfield & Swire represent the Chartered Bank of India, Australia and China and the Russian Union Bank : the Bank of Taiwan has a branch in the Ma-lo.

Weights and Measures

Linear : the *Swatowchek* or *chih* in general use = 12·7 in.
the *Pai-tsin-chek*—a cloth measure = 14·7 in.
the *Mut-chek*—carpenter's measure = 11·3 in.

Capacity.—Two standard units : *Ching-fu-tau* (2·74 gals.) and *Ching-hai-tau* (2·85 gals.). The actual measures are bamboo tubes (*t'ung*) of four sizes $\frac{1}{10}$, $\frac{2}{10}$, $\frac{5}{10}$ and 1 *t'ung* : 20 *t'ungs* being equal to 1 *ching-fu-tau*.

Weights : there are three kinds of units in use :

Sz-ma'-ching in general use. 1 *kên* or *chin* = $1\frac{1}{3}$ lb.

Ching-san-chêm-ching for bean-oil and bean-cake. 1 kên = $1\frac{2}{3}$ lb.

Ching-tung-chêm-ching for sugar. 1 kên = $1\frac{21}{29}$ lb.

Supplies.—The markets are plentifully supplied with rice, vegetables, fruit, fish, poultry, eggs, salt and sugar. Meat, with the exception of pork, can be obtained only in limited quantities. Cattle and goats are bred locally but not in large numbers.

A good water supply is obtainable from the town water-works.

All the British firms have coal, of which there is generally 3,000 to 6,000 tons in the port.

There are oil-tanks at both Kak-chio and Kialat.

Transport.—There is no wheeled transport in this region, with the exception of the rickshas which run on the Ma-lo at Swatow ; and all transport by land apart from the railway is carried by coolies of whom large numbers are available.

The surest and easiest means of communication is by water, and large numbers of native craft ply on the rivers and their tributaries. Junks of from 12 to 30 tons burden can navigate the Han River up to Shak-ha-pa on the Fukien frontier, above which only shallow draught boats are usable. Launches are used to tow passenger and cargo junks. A special type of junk on the Han River is the paper-boat or *liu-p'êng-ch'uan*, broad and flat-bottomed with bow sharply sheering to a height of 10 ft. It is propelled by poling.

The following is a list of launches available in June 1912 at Swatow with their passenger capacity :

Number.	*Total Capacity.*
10 Chinese launches . . .	2,259 men
2 German motor boats . . .	142 ,,
3 small Chinese launches . .	474 ,,
1 Customs launch	30 ,,
2 small British motor boats . .	40 ,,

Of the 10 Chinese launches, the largest carries 316 passengers and the smallest 199.

Of smaller boats there are 20 foreign gigs, 30 ft. long, 6 ft. beam and $2\frac{1}{2}$ ft. draught.

A new fast French launch, the *Chiyak*, started on the Tathowfow run in 1914.

In 1916 two new motor launches [1] (W. G. Humphrey & Co.) started on the Swatow–Kityang and Swatow–Tathowfow runs; and two owned by the Singer Sewing Machine Co. started to ply on the Han River above Chaochowfu.

See also p. 237.

There are usually three or four battalions of Chinese troops stationed at Swatow.

Communications.—The country roads are for the most part similar to those in other parts of Kwangtung and consist of narrow tracks along the tops of dykes and paddy bunds. Apart from the short line of railway to Chaochowfu (q. v.) communications are mainly by boat. Large steamers of the Douglas Company run to Hongkong and Foochow twice weekly and there are services to Canton and to Anping and Tamsui in Formosa. Frequent steamers run to Singapore and Siam: to Amoy, Saigon, Straits Settlements, Dutch East Indies and Cochin China. The companies engaged in this traffic are Jardine, Matheson & Co., Butterfield & Swire, the Douglas Company, Lauts & Haesloep, the Deli Planters Association, China Merchants Steam Navigation Co., the Siang Co., Hock Cheang and Fock T'ung Companies and various Japanese firms.

At the end of 1915 there were 22 steam launches and 10 motor launches engaged in local traffic. They run to Kityang: to Chaoyanghsien SW. of Swatow calling at Kai-pou, Pau-ti and Kukkai: to Tathowfow: to Swabue, 125 miles westward along the coast, calling at Kapchi, Shên-ch'üan and Kitchioh: to Ungkung, near the border of Fukien, calling at Namoa.

A large coasting trade is carried on in junks varying in size from 476-ton lorchas, 357 ton *t'ou-mêng* and *hai-po* to *hung-t'ou* and *ch'ing-t'ou* which run from 178 to 238 tons. These junks are three-masted with ordinary mat sails.

A branch of the Han River runs to Chaochowfu, but it is so

[1] Built at Hongkong and fitted with Bolinder's crude-oil motor engines of 120 and 100 h. p. respectively. Speed 10 and 11 knots. It is stated (June 1918) that Messrs. Humphrey & Co. intend to add four more launches to their fleet.

shallow that it is only available for flat-bottomed boats: see also pp. 108–9 for navigation above Chaochowfu: the Kityang River is navigable for large junks to Kityang and for smaller craft above that city (see pp. 110–11).

The *Chao-Shan Railway*, single track, standard gauge, connects Swatow and Chaochowfu, a distance of 24·2 miles, and calls at six intermediate stations—Ampow, Ebue, Tsaitangshi, Kua-tsha, Fow-yong and Fungkai—with an extension of about 2 miles to the junk port of Ikoi above Chaochowfu. The station, about ½ mile NE. of Swatow across the Han River, is connected by a macadamized road with the north-east corner of the town. At the end of 1916 construction of a light tramcar line from Chi-lu on the Han River, near Swatow, to Chang-lin a market town 15 miles distant, was begun. The cars were to be small enough to be hauled by two coolies.

The Chinese post office (first class) and telegraph office is situated in the Chi-ang-koi; the Japanese and Norwegian post offices in the Hai-kuan-tai-koi; the German post office in Kialat and the British in Kak-chio. Connexion can be made with all stations of the Eastern Extension and Great Northern Telegraph Companies, but the nearest cable station is Amoy. There is a military telephone between Swatow and Chaochowfu.

Distances from Swatow

		nautical miles.	
To Hongkong	by sea	198	
Amoy	,,	147	
Foochow	,,	315	
Canton	,,	274	
Tamsui (Formosa)	,,	315	
Anping	,,	266	
Shanghai	,,	670	
		miles.	
Chaochowfu	by rail	24·2	
Chaochowfu	by water	30	
Kityang	,,	32½	Route 30

SZEWUI

Approximate { Latitude, 23° 26′ N.
Longitude, 112° 31′ E.

Authorities: Maritime Customs Reports; Henry, Lingnam; China Sea Pilot.

Szewui (Ssŭ-hui-hsien) is a walled town on the left bank of the Bamboo River about 17 miles above its confluence with the North River.

It has a long wall running beside the river. The houses are low and poorly built and the business quarters are in the western and northern suburbs where there are several busy streets along a small creek. The **population** is estimated at about 10,000. There are tea and bamboo plantations in the neighbourhood and mandarin oranges are exported.

Nine miles farther up stream is the market town of Shekkow where the bamboo rafts are made up and floated down to Fatshan and Canton.

The Bamboo River is only navigable by shallow-draught boats, and Szewui is the terminus for launches. The channel opposite the town is narrow with a depth of 4 to 5 ft.

There is a Baptist chapel and a vaccination hospital; and a post office of second-class status.

Distances from Szewui

		miles.	
To Samshui	by water	24½	Route 47
Waitsap	,,	64½	,, 47
Shekkow	,,	9½	,, 47

TAILEUNG or SHUNTAK

Approximate { Latitude, 22° 52′ N.
Longitude, 113° 14′ E.

Authority: Ray, Geography of Kwongtung.

Taileung (Ta-liang) or **Shuntak** (Shun-tê Hsien) is situated on the Shuntak Creek which joins the Shuntak Branch with

the Taileung Creek. The old city of Shuntak has walls about a mile in length and 18 ft. high, with a moat 20 ft. wide. It is the centre of the important silk-trading district of the Delta in which there are no fewer than 200 steam filatures at work.

The **population** is estimated at about 40,000.

South of it on the Taileung Channel is the large town of Jungki (Yung-ch'i) which is also engaged in the silk trade.

Taileung has a post office (second-class) with telegraph.

Distances from Taileung

To Canton	by water	about 30 miles.
Kumchuk	,,	,, 16 ,,
Kongmoon	,,	,, 30½ ,,

TAI-P'ANG-SHING (see Plan)

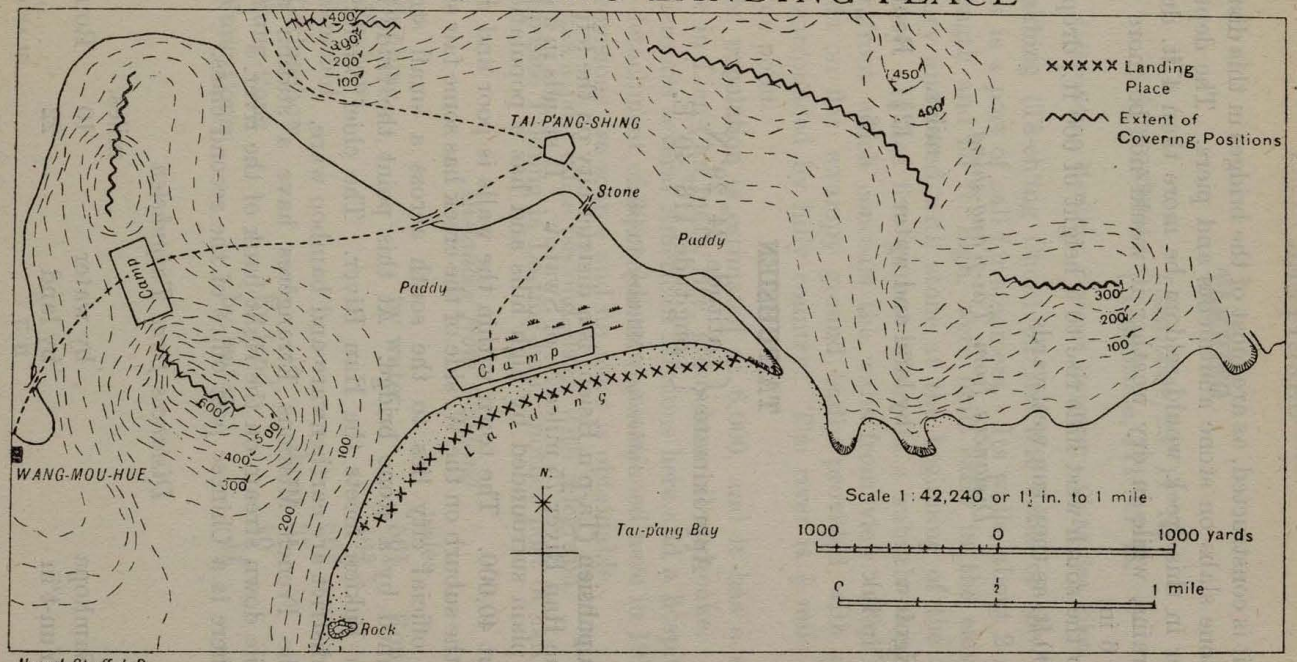
Approximate { Latitude, 22° 36′. Longitude, 114° 30′.

Authority: Military Report.

Tai-p'ang-shing is a small city on the W. side of Mirs Bay surrounded by a wall in a somewhat dilapidated condition. It is about 200 yds. by 300 yds. in area. The streets and houses are mean and dirty. The wall is some 25 ft. high banked on the inside with a grass bank. The main entrance is at the SW. angle where there is a small suburb. On the top of the wall there are many 10-pounder M.L. guns, some on standing carriages, some dismounted.

The *surrounding country* is hilly ; to the north rises the range of hills crossed on the way to Pa-kong. The land between the town and the sea is flat, wet, and uncultivated. Close behind the beach is a dry sandy 'down', and behind this again is a small marsh. Roads lead round and through this and it would not form a serious obstacle. There is a bridge crossing the creek as shown on map. This bridge has a length of 50 ft. in three spans of 15 ft. and one short span of 5 ft. Its breadth is 3 ft.

TAI-P'ANG-SHING LANDING PLACE



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and it is constructed, as are most of the bridges in this district, of stone slabs on stone abutments and piers. The depth of water in this creek would seldom be more than 4 ft. during the rains, while in dry weather it would not be more than 1 ft. 6 in.

To the south-west hills rise to a height of 600 ft., dropping to 300 ft. as they run westwards.

Distances from Tai-p'ang-shing

		miles.	
To Ngotow	by land and water	12¾	Route 14
T'ip-fuk	,,	6	,, 15

TAIPUHSIEN

Approximate { Latitude, 24° 29′ N. / Longitude, 116° 40′ E.

Authority: Military Report.

Taipuhsien (Ta-p'u Hsien) is a district city on the left bank of the Han River 75 miles N. of Swatow. It stands in a small rice plain surrounded by high hills and has a population of about 40,000. The town within the walls is poor and dead; but the suburb on the W. side of the creek has some fair shops. The official city lies to the south across a small stream, spanned by a stone bridge. At this point the trade route from Fukien meets the Han River. The chief products of the district are earthenware and bamboo ware.

The French Missions Étrangères have a station about ¾ mile down stream on the right bank of the river.

There is a Chinese post office of the second class.

Distances from Taipuhsien

		miles.	
To Samhopa	by water	10	Route 27
Yun-t'in	by land	22	,, 28

TAKHING

Approximate { Latitude, 23° 11′ N.
Longitude, 111° 47′ E.

Authorities: Maritime Customs Reports; China Sea Pilot.

Takhing (Tê-ch'ing Chou) on the left bank of the West River is a port of call for steamers. Its walls, about 2 miles in length and 35 ft. high, were built early in the eleventh century and faced with stone at the beginning of the Ming dynasty. It has five gates. There is a suburb along the river front which conceals the walls from view. The town stands on flat swampy ground badly provided with paths and surrounded by hilly country. The river is ½ mile wide at this point.

The **population** is estimated at 6,000, and it has a small trade in Lien-t'an mats, rice, groundnut oil and cake.

There are several American Missions here and a hospital.

A detachment of 300 soldiers was stationed here in 1912.

Provisions are scarce and no meat is obtainable.

It has a post office (second-class) with telegraph.

Opposite Takhing is Lo-ting-hau, another port of call.

Distances from Takhing

			miles	
To Shiuhing	by water		56¼	Route 48
Wuchow	,,		46¾	,, 48
Samshui	,,		86¾	,, 48
Lotingchow	,,	about	37	
Yung-t'ong	by land		10	,, 50
Yung-t'ong	by water		4½	,, 48

TAMSHUIHÜ

Approximate { Latitude, 22° 51′ N.
Longitude, 114° 30′ E.

Authority: Military Report.

Tamshuihü (Tan-shui-hsü) is a small walled city surrounded by a wall 20 ft. high and 1 ft. thick. The ground enclosed by the walls is 600 ft. by 300 ft., but this by no means represents the size of the city, as large parts of this include space under cultivation or waste. The population is said to be 8,000. It is a dilapidated place and appears to have seen better days. There are no good shops or buildings except three pawnshops. The only importance the place possesses now lies in the fact that it is the head of navigation on the route from Ngotow to Waichow.

The immediately surrounding country is flat, and noted for its fruit-growing. Hills averaging 500 ft. surround the city at a distance of 3 miles. The western wall of the city runs alongside the Tamshui River, which is crossed by a narrow trestle bridge.

It has a postal agency, and is in direct communication with Hongkong, which it supplies with fresh fruit and vegetables by way of Ngotow and Shaukiwan.

Distances from Tamshuihü

		miles	
To Waichow	by water	40¾	Route 18
Ngotow	by land	10	,, 19
Lungkonghü	by land and water	15	,, 20

TENGHAIHSIEN

Approximate { Latitude, 23° 28′ N.
Longitude, 116° 45′ E.

Authorities : Maritime Customs Reports.

Tenghaihsien (Têng-hai Hsien), a district city, about 10 miles north-east of Swatow, is situated on the right bank of an arm of the Han River in the middle of the delta. Its walls are about 3,000 yds. in length and it has 5 gates. It has a considerable **population** and is noted for its cotton cloth looms. The chief products of the district are fans, garlic, oysters, joss-paper, liquid indigo, pottery, feathers, rice products, fresh fruits, hemp thread, tiles, and salted turnips.

There is a Chinese post office of the second class.

TINGAN

Approximate { Latitude, 19° 40′ N.
Longitude, 110° 21′ E.

Authorities : Pearson's Report : Maritime Customs Reports ; Henry, Lingnam.

Tingan (Ting-an Hsien, locally Dengan) is a trading centre in Hainan at the meeting-point of several routes and on the navigable part of the Po-ch'êng River. It is an old city with walls (now dilapidated) abcut 2 miles in length and 18 ft. high, with 4 gates ; and it is a busy market. **Population** estimated at 3,000.

There is a postal agency.

Distances from Tingan

		miles	
To Hoihow	by land	22	Route A
Hoihow	by water and land	29	,, M
Kachek	by land	40	,, B
Lai-chee-do	,,	68	,, O
Kimkang	by water	20	

TINPAK

Approximate { Latitude, 21° 30′ N. / Longitude, 111° 15′ E.

Authorities: China Sea Pilot; Hirth, 'Beschreibung der chinesischen Küste,' Deutsche Geographische Blätter, 1881.

Tinpak (Tien-pai Hsien) is a district city on the coast about 60 miles north-east of Kwangchowwan. According to Chinese accounts it has walls 2½ miles in length and 20 ft. high, with a moat 30 ft. wide.

The town stands at the head of a shallow bight eastward of the inlet and can be approached at high water through the creeks which intersect the extensive flat between it and the entrance.

Tinpak harbour is protected on the south and east by the peninsula called Lamtau and on the W. by an island. The entrance is about one-third of a mile wide; and there is a channel leading into the bight with depths of 5 to 2½ fathoms at low tide, between flats which are dry at low water. There are forts at the entrance where junks enter in 2 fathoms of water and load. The tides rise 8½ ft.

Salt making is an important industry on this part of the coast and a large junk trade is carried on at this port in this and other commodities.

Supplies are obtainable from villages near the harbour; and water from the off-lying island of Ti-fung-kioh at a spring near the shore.

There is a post office of second-class status.

Distances from Tinpak

		miles	
To Yeungkong	by land	56	Route 72
Shuitung	,,	21¼	,, 72

TSINGYÜN

Approximate { Latitude, 23° 40′ N. / Longitude, 112° 53′ E.

Authorities: Military Report; Maritime Customs Reports; Madrolle, Chine du Sud.

Tsingyün (Ch'ing-yüan Hsien, locally Tsing-yün-yün) is a district city on the right bank of the North River about 45 miles above Samshui. It has a water front of nearly 2 miles occupied by suburbs, with the walled city lying behind. It is well built and prosperous-looking, with a **population** estimated at 35,000 to 50,000.

The City.—The walls are about 1¾ mile long and 22 ft. high with 4 gates. They were rebuilt in 1466. On the W., N., and E. sides is a moat 20 ft. wide. The water front is crowded with shipping. The manufacture of flour, pea-nut oil and matches are the chief industries.

The *surrounding country* is a flat plain, thickly populated and well cultivated. Rice is the chief product, but sugar-cane is also grown, and there are tea and bamboo plantations in the neighbourhood. To the north, about 5 miles distant, are the Pat-ts'eung mountains about 2,000 to 2,500 ft. high; and just above Tsingyün the river enters the beautiful Tsingyün gorge which extends eastwards.

Missions.—The American Baptist Mission and the French Missions Étrangères have stations with resident foreign missionaries.

Supplies.—The usual supplies of vegetables, fowls, and rice can be obtained here, and a few cattle are to be had.

Communications.—Tsingyün is 10 miles from the nearest point on the Yüeh-Han Railway as the crow flies and 15 miles, or two hours' journey, by steam launch up stream. Daily communication is maintained by launch with Canton, via Samshui, the journey taking 13 hours up, and 8 to 9 hours down, stream. Smaller launches run daily to Yingtak, the journey taking 12 to 13 hours up, and 7 to 8 down, stream.

These launches tow large passenger junks holding about 300 persons.

Road communications are very bad, but a trade route, now little used, exists between Canton, Tsingyün, and Yingtak.

There is a telegraph office at the District Magistrate's Yâmen; and a post office (second class) in the main street of the town.

Distances from Tsingyün

		miles.	
To Yingtak	by water	47¼	Route 55, 56
Samshui	,,	51½	,, 55
Canton	by land	62½	,, 54
Kai-hau (Tsungfa)	by land and water	64	,, 38

TUNGKUN

Approximate { Latitude, 23° N. / Longitude, 113° 51′ E.

Authorities: China Sea Pilot; Hirth, Walled Cities of Kwangtung.

Tungkun (Tung-kuan Hsien) is a walled city on the left bank of the Tungkun River which joins the East River with the Canton River. Its walls are about 3 miles in length, 25 ft. high and surrounded by a moat about 30 ft. wide. It is an industrial city lying in the sugar-growing district, and it has large manufactures of matting and fireworks. Its **population** has been estimated at 150,000, but it is likely that this number is exaggerated. There is a large German mission hospital.

It is approached from Canton through the Sawchi channel; and though it is only about 17 miles from Sheklung, the river between is shallow and can only be navigated during the summer freshets. There is daily communication by steam launch with Canton and Taiping.

It has a post office of the second class, with telegraph.

Distances from Tungkun

To Canton	by water	about 44 miles
Sheklung	,,	,, 17 ,,

TUNGON

Approximate { Latitude, 23° 1′ N.
Longitude, 111° 55′ E.

Authorities: Maritime Customs Reports ; Hirth, Walled Cities of Kwang-tung

Tungon (Tung-an Hsien), lying in a little secondary basin about 3 miles south of the West River and 9 miles from the mouth of a small tributary which joins the main river just above Yütshing, is a walled town. Its walls built in 1577 are a mile long and 17 ft. high with 3 gates.

WAICHOW (see Plan)

Approximate { Latitude, 23° 3′ N.
Longitude, 114° 36′ E.

Authorities: Military Report ; China Sea Pilot ; Ray, Geography of Kwongtung.

Waichow (Hui-chou Fu), an important prefectural city, stands on the left bank of the East River at the point of junction with the Tamshui River. It is connected by a bridge of boats with Kwaishin (Kuei-shan Hsien), the district city, on the right bank of the Tamshui River. The **population** of the two places is variously estimated at 70,000 and 100,000.

The *city* is ¾ mile by ½ mile in size ; and its walls, which are 40 ft. high and 12 ft. thick, are in remarkably good repair and considered the finest in the province. It is almost surrounded by water. On the N. and E. are the two rivers and on the W. the West Lake. Low hills rise to the south-west.

The streets are narrow and very dirty. There are a few good shops of the Chinese type in the main streets, but the greater portion of the town is given up to residences. The Ho-kok silkworks, a large group of white buildings, are situated on the W. of the lake.

The *West Lake* (Sai-fu) is over 3 miles long, with a causeway and two 5-arch bridges running out to a small island in the

centre on which is a pavilion. There are many temples and monasteries on its shores and a number of pleasure boats ply on it.

The *bridge of boats* between Waichow and Kwaishin is about 250 ft. long and consists of 15 pontoons, each formed by lashing 3 sampans (20 ft. long by 5 ft. beam) together and securing on the platform thus formed a flooring 20 ft. by 15 ft. The pontoons are then placed in position with the bows of the sampans alternately up stream and across stream, and secured by two strong chains, the links of which are $\frac{5}{8}$ in. iron, passing from bank to bank.

A number of troops (1,500 modern-drilled soldiers, in 1912) are stationed at Waichow.

The Waichow district is rich in agricultural land, and its chief products are rice, sugar, and hemp.

Missions.—The Berlin Mission Society and the Seventh Day Adventists have branches at Waichow.

Supplies.—Provisions are scarce and meat is not obtainable.

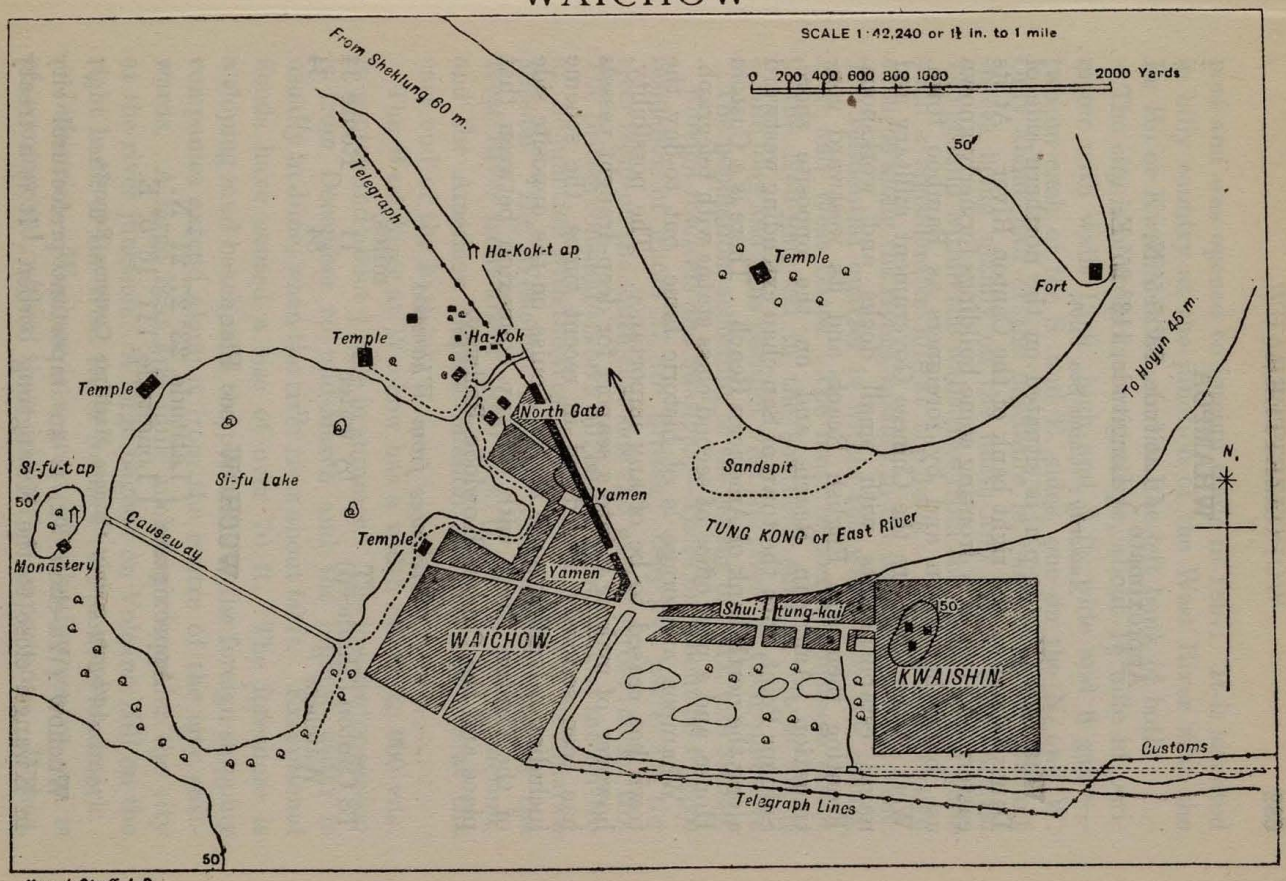
Communications.—Steam launches run on the East River from Sheklung during the summer, when the water is high. The projected railway from Swatow to Canton will pass Waichow.

There is a post office (second class) with telegraph. In 1912 a telephone service was installed between Waichow, Kwaishin, Sha-ü-chung, Pingshan, Wongkonghü, and Tamshuihü. The wires were blown down in the following year and do not appear to have been re-erected.

Distances from Waichow

		miles.		
To Sheklung	by water	$54\frac{1}{4}$	Route	34
the Canton River	,,	$79\frac{1}{2}$	,,	34
Canton (Shameen)	,,	95	,,	34
Tamshuihü	,,	$40\frac{3}{4}$	,,	18
Samtohü	,,	$63\frac{3}{4}$	,,	17
Lungchün	,,	$113\frac{1}{2}$	,,	22
Hoyün	,,	72	,,	22
T'o-t'ong	by land	28	,,	35

WAICHOW



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WHAMPOA

Approximate { Latitude, 23° 5·5′ N.
Longitude, 113° 25′ E.

Authority: China Sea Pilot.

Whampoa (Huang-p'u) is situated on the northern side of Danes Island on the right bank of the Canton River. At its eastern end is a jetty fronting some buildings formerly known as Chang-chau town and by foreigners as Bamboo town. West of the town are the Chinese Government military and naval establishments with small docks and workshops. Fronting them are English Reach and its westward continuation, American Reach, and on the opposite shore, Sulphur Point, with the town of San-chau extending westward along the north bank of American Reach. There is a Custom House, and a post office of second-class status with telegraph.

Whampoa anchorage is of historic fame, but to-day the town has ceased to be of any importance. The possibility, however, of making it into a seaport for deep-draught vessels has been seriously considered in recent times, the scheme including a landing-place at Mt. Louisa on the opposite side of the Canton River with railway connexion between that place and the Canton–Kowloon Railway.

Distances from Whampoa

		miles.	
To Canton (Shameen)	by water	11	Route 34
Waichow	,,	84	,, 34

WUCHOW (see Plan)

Approximate { Latitude, 23° 27′ 21″ N.
Longitude, 111° 16′ 6″ E.

Authority mainly Chinese Maritime Customs Reports.

Wuchow (Wu-chou Fu) is an important prefectural city in Kwangsi close to the Kwangtung border. It is a treaty

port and was opened to foreign trade in 1897. It is situated in hilly country at the junction of the West River with the Fu Ho or Kweilin River, and on the left bank of both.

The *city* is of irregular oval shape, about 1½ mile in perimeter with walls 12 ft. high and 8 ft. wide and 6 gates—two on each of the S. and E. sides, one on the N. and W. Only about half of the enclosure is built over, the vacant spaces being mainly on the north and north-east quarters. The ground within the walls rises from the river and the walls scale a considerable hill at the back. There are extensive suburbs along the rivers, mainly in the south and south-west. The residential quarter is within the walls near the South, East and West Gates. The most important business street is the Kou-fong-kai in the southern suburb. It is about ½ mile long and runs parallel with the rivers at their junction.

The **population,** according to the census of 1911, was 39,649.

Foreign residents and missions.—There are about 50 foreign residents, of whom 27 are British; they live partly on the river front on the south-east side and partly across the Fu Ho. The British consulate is on a hill on the right bank of the Fu-Ho at the junction with the West River; and near it is the Alliance Mission. The Wesleyan Mission and hospital are on the West River front about 1,000 yds. W. of the river junction, and the American Baptist Mission and hospital are at the east end of the harbour.

The *West River* at Wuchow has a width of 800 to 900 yds. in winter and about ¾ mile in summer. The low-water season is from December to mid-March and the highest water is usually in June, when the river rises about 50 ft. Exceptional floods have caused a rise of over 70 ft. The foreshore is a sloping mud beach, and the pontoons of the foreign shipping companies extend along it from the centre of the city eastwards. A large boat and junk anchorage is under the city at the river junction. A large pagoda on Volcano Hill on the right bank of the West River forms a conspicuous landmark.

Industries.—Wuchow is a great distributing centre and is of commercial rather than industrial importance. It has,

however, an electric lighting company, a steam filature, manufactures of cotton cloth, knitted goods, glass and silk-worm gut, and extensive shipbuilding works. There is a smeltery for antimony about a mile up the river on the left bank.

The chief *articles of export* are wood oil, hides, leather, aniseed, poultry, raw silk, bamboo, firewood, indigo, paper, sugar, rice, and cassia.

The *shipping* returns for 1916 show 5,013 steamers (tonnage 965,024) entered and cleared under General Regulations; and 3,749 launches (tonnage 104,030) under Inland Steam Regulations.

Communications are almost entirely by water. There is a daily steamer service to Hongkong and frequent services to Canton. Launches run to Nanning, Lungchow, Poseh, and Liuchowfu up the West River and its branches, and boats trade to Kweilin on the Fu Ho.

There is a Chinese post office of first-class status with telegraph.

Approximate distances from Wuchow

		miles.	
To Samshui	by water	133½	Route 48
Canton	,, (steamer route)	229	
Hongkong	,,	224	
Nanning	,,	371	,, 51
Lungchow	,,	500	
Poseh	,,	553	
Liuchowfu	,,	290	
Kweilin	,,	222	
Tengyün	,,	32½	,, 51
Konghow	,,	95	,, 51
Sünchow	,,	113	,, 51
Kweihsien	,,	179½	,, 51
Sz-kun-po	,,	224	,, 51
Hengchow	,,	247	,, 51
Namheung	,,	264	,, 51

YAMCHOW

Approximate { Latitude, 21° 48′ N. / Longitude, 119° 24′ E.

Authorities: Maritime Customs Reports; China Sea Pilot.

Yamchow (Ch'in-chou) is situated on the right bank of the Kiu Kiang which flows into the Gulf of Tonkin. Its port, Lung-mên, about 30 miles by water, and 24 miles by road, down stream, is about 12 miles from the mouth of the river above the bar and has an anchorage of 4 to 5 fathoms depth. The bar situated $6\frac{1}{2}$ miles eastward of Tiao Tan islet has about 12 ft. of water at low tide over a breadth of half a mile, but its entrance is dangerous without local knowledge. Light draught boats can ascend from Lung-mên to Yamchow.

The walls of the *city* are about $1\frac{1}{2}$ mile in circumference (according to Chinese sources of information) and about 30 ft. high with a moat 24 ft. wide and 10 ft. deep. The commercial quarter lies along the river, which is about 60 yds. wide at this point. Junks of 60 to 90 tons can discharge here.

The **population** is estimated at 60,000.

Yamchow is an entrepôt for the trade with Nanning, goods being transferred from junks and boats and carried by the land route to Nanning a distance of about 100 miles. Like Pakhoi, however, it has suffered by the opening of the West River and the development of French Indo-China.

The proposed railway (see p. 160) from Yamchow to Nanning and into Yunnan would do much to revive the importance of the place; and it is said that the port of Lung-mên has been surveyed by French engineers who were satisfied that satisfactory shipping accommodation could be obtained.

There is a post office of second-class status with telegraph.

Distances from Yamchow

		miles	
To Pakhoi	by land	62	Route 84
Limchowfu	,,	46	,, 84
Lingshan	,,	83	,, 85
Nanning	,,	106	,, 86
Moncay	,,	46	,, 87

YEUNGKONG

Approximate { Latitude, 21° 53′ N. / Longitude, 111° 55′ E.

Authorities: Ray, Geography of Kwongtung; China Sea Pilot.

Yeungkong (Yang-chiang Ting) on the left bank of the Mak-yeung Ho about 3 miles from the mouth. This river flows into Deep Bay which is fronted by shallow water extending 2 miles on its E. side and 4 to 5 miles on the W. It has not been charted, but is extensively used by native shipping. There are forts on either side of the river entrance.

The *town* which is said to have about 35,000 inhabitants is conspicuous for its seven pagoda and noted for its leather trunks.

The *surrounding country* is mountainous and occasionally suffers severely from want of water and has to import rice. Cattle, pigs, chickens and eggs are exported.

The town of Yeungchun (Yang-ch'un Hsien) is situated about 30 miles up the Mak-yeung River. Sugar is grown in this district. Just below Yeungkong and on the same bank the tributary Na-lung Ho flows in from the N. It gives water communication with Nalung from which a post road runs to the head of navigation of the Sunchong river system above Yanping. It is proposed to extend the Sunning Railway to Yeungkong and work on the extension from Sunning has already begun.

Yeungkong has a post office (second class) with telegraph,

Distances from Yeungkong

		miles		
To Mashui	by land	22	Route	71
Yeungchun	,,	30	,,	70, 71
Kochow	,,	95	,,	71
Tinpak	,,	56	,,	72
Shuitung	,,	77	,,	72
Ngchünyün	,,	103	,,	72
Yanping	by land and water	40	,,	53
Sunchong	,,	66	,,	53
Kongmoon	,,	105	,,	53

YINGTAK (see Plan)

Approximate { Latitude, 24° 10′ N.
Longitude, 113° 5′ E.

Authorities: Military Report; China Sea Pilot.

Yingtak (Ying-tê Hsien) is a small walled city on the right bank of the North River. The walls are less than a mile in length and there are four gates named after the points of the compass. There are suburbs on the N. and W. sides, that on the W. being the most important and including some fair shops. The **population** is said to be about 7,000, and the town is a busy shipping port and a distributing centre for the Hakka district of Yungyün. There is a large export trade in rice, and a considerable ship-building industry.

Surrounding Country.—Yingtak lies on a bend of the North River at the point where it is joined by the Yung Kong on the left bank and the small Shek Shui on the right. Below the town is a range of cliffs, one of the 'gates' of the North River. A low range of hills running N. by E. rises just beyond the north suburb. They are covered with grass and a temple stands on the top and at the base the country is dry and covered with what appears to be a weed. Otherwise the ground is fairly flat in this quarter and well wooded. West of the town is a plain stretching three to five miles and bordered

by mountains. South is a group of hills some 400 ft. high, with a finger-shaped cairn on the summit which is a well-known landmark called ' the pointing finger '.

South of the Yung Kong the country is flat and given up to rice cultivation. It is thickly populated, and in one square mile 13 villages of about 300 inhabitants each were counted. North of the Yung Kong the country is drier with hills 50 to 100 ft. high. It is well wooded with fir up to 1 ft. diameter and bamboo up to 4 in. About a mile and a half inland runs the main road to Shiuchow, which is merely a well-marked track.

The Yung Kong is crossed by the *Yüeh–Han Railway* on an important bridge, 750 ft. long.

The district of Yingtak is rich in ores, including copper, zinc, tin, lead, a little gold and silver. Excellent lime is made and very good clay is obtainable. Sulphur, alum and silicates are also found.

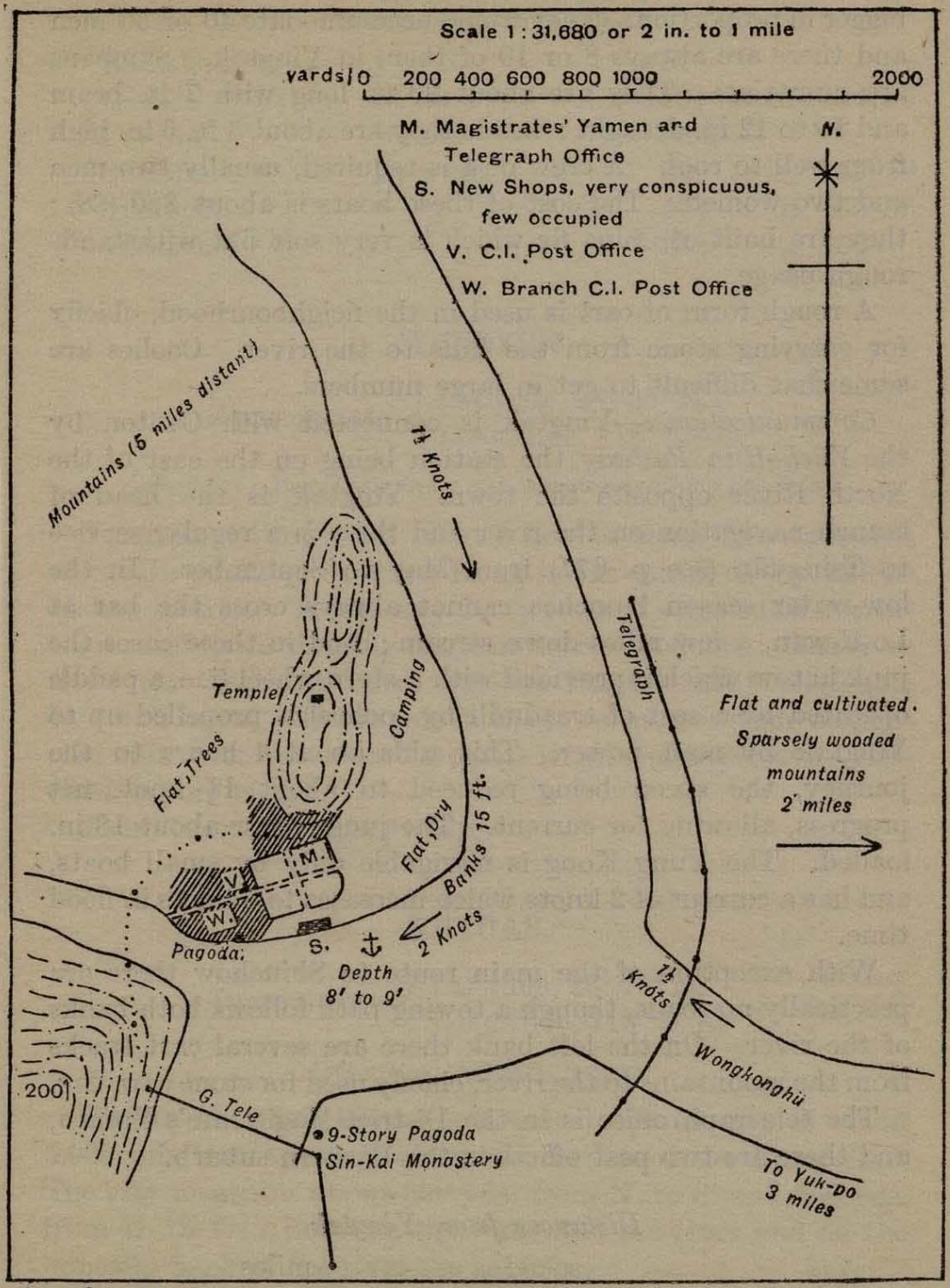
Camping-ground.—The best camping-ground is to the N. of the city between the hills and the river. Here the country is dry, hard and gently sloping.

Missions. There are two missionaries, representing respectively the American Presbyterian and the Wesleyan Missions. The latter lives on the water front near the junction of the Shek Shui and the North River.

Supplies.—The district produces barley, wheat, white beans, peas, hempseed, maize, cotton, tea, ground-nut oil, pepper and sugar. Bullocks are plentiful, but horses are scarce in spite of the fact that the country is suitable to horse-breeding. The beef and pork are good.

Transport.—Yingtak being a ship-building town boat transport is always obtainable. The usual type of junk is that known as *Shek-ma,* built in two sizes, the smaller of which is 60 ft. long with 9 ft. beam and 2 ft. 6 in. draught. They are well built with three or four water-tight bulkheads, and they are sailed, towed or poled by a crew of 4 to 6. They carry 500 piculs (about 30 tons) and cost $800 to $1,000 (£80 to £100) to buy when new. The larger size are some 20 ft. longer and

YINGTAK



Naval Staff I. D

bigger in proportion. They would accommodate 40 or 50 men and there are always 8 or 10 of them in Yingtak. Sampans are numerous. They are about 30 ft. long with 7 ft. beam and 10 to 12 in. draught : inside they are about 5 ft. 6 in. high from well to roof. A crew of 4 is required, usually two men and two women. The cost of these boats is about $80 (£8) ; they are built of China fir which is very soft but withstands rough usage.

A rough form of cart is used in the neighbourhood, chiefly for carrying stone from the hills to the river. Coolies are somewhat difficult to get in large numbers.

Communications.—Yingtak is connected with Canton by the *Yüeh–Han Railway*, the station being on the east of the North River opposite the town. Yingtak is the head of launch navigation on the river and there is a regular service to Tsingyün (see p. 677) from May to September. In the low-water season launches cannot always cross the bar at Lo-ti-wan, a few miles down stream ; and in these cases the junk in tow which is provided with a stern-wheel (i. e. a paddle operated by a sort of treadmill by coolies) is propelled up to Yingtak by man power. This adds about 4 hours to the journey, the speed being reduced to about 1½ knot, net progress, allowing for current. The junks draw about 18 in. loaded. The Yung Kong is navigable only by small boats, and has a current of 2 knots which increases to 8 knots in flood time.

With exception of the main route to Shiuchow there are practically no roads, though a towing path follows both banks of the river. On the left bank there are several cart tracks from the mountains to the river, chiefly used for stone carrying.

The telegraph office is in the District Magistrate's Yamen, and there are two post offices in the Western suburb.

Distances from Yingtak

		miles	
To Shiuchow	by water	61½	Route 57
Shiuchow	by land	58¼	„ 58

Distances from Yingtak

Shiuchow	by rail	87		
Canton	by land and water	$110\frac{3}{4}$	Routes	54, 56
Canton	by rail	53·2		
Samshui	by water	99	,,	55, 56
Tsingyün	,,	$47\frac{1}{2}$	,,	55, 56
Wongshek	,,	$23\frac{1}{2}$	,,	56

YUNGYÜN

Approximate { Latitude, 24° 28′ N.
Longitude, 113° 25′ E.

Authorities: Ray, Geography of Kwongtung; China Sea Pilot.

Yungyün (Wêng-yüan Hsien) lies between two branches of the Ju-po River or Yung Kong in the centre of a populous Hakka district. It is a very dusty town of some 6,000 inhabitants, and has a thriving trade in native products. The river flows into the North River opposite Yingtak and is navigable by small boats. The rapids in the lower part impede navigation and make the inward freights small and expensive. The chief export is rice.

There is a postal agency here.

YÜYÜAN

Approximate { Latitude, 26° 14′ N.
Longitude, 119° 3′ E.

Authorities: Military Report.

Yüyüan (Ju-yüan Hsien) is a walled district city of about 5,000 inhabitants, situated on the banks of the Lung Shui. The city measures about 600 yds. from N. to S. and 300 yds. from E. to W. Between the walls and the river and on the opposite bank of the river are suburbs.

Surrounding Country.—The city lies in a basin. Hills rising to 800 and 900 ft. surround it in a circle. To the N. some

3 miles distant are the Wan-mun Shan, with rocky pinnacles rising to 2,000 ft. To the south are hills with patches of wood.

Communications.—The river is some 70 yds. broad and 4 to 5 ft. deep at the city. Junks drawing less than 2 ft. can ascend to Yüyüan when the river is normal.

Road communication is bad. The roads to Shiuchow and Kwai-t'ao are described in Routes 64 and 65. Communication with Linchow is via Yanwohü, Lokchong, the Siu Shui, and the Tai-fu or upper reach of the Linchow River. This route takes 5 to 6 days. There is a mountain road, but it is practically inaccessible if any load is to be carried.

There is no telegraphic communication. The post is brought up the Lung Shui.

Transport is by boat and coolie.

Supplies are not very plentiful. The district just supports itself, and rice, vegetables, chickens and fish are all that can be relied on.

Camping-ground.—The lower spurs of the hills are suitable for camping.

Missions.—There is a branch of the English Wesleyan Mission under a native pastor. It has two meeting houses, one in the south suburb and another across the river close to the bank.

Native tribes.—In the Yüyüan district many of the Yiu tribe are seen. They inhabit the high mountains, and come down to the plains with vegetables for sale. They speak an entirely different language, and differ in many respects from the Chinese of these parts. They belong mostly to 3 clans clinging closely together. They are fairly peaceable except when roused; and then they are somewhat formidable.

Distances from Yüyüan

		miles	
To Shiuchow	by land	$28\frac{1}{2}$	Route 64
Kwai-t'ao	„	$19\frac{3}{4}$	„ 65

APPENDIX I

TRANSLITERATION OF KWANGTUNG PLACE-NAMES

THE fact that several different dialects are spoken in the province of Kwangtung has complicated the task of transliterating place-names in the present volume. The following general principles, however, have been adopted:

1. All names occurring in the Chinese Postal Guide have been written as they stand in that publication.

2. In the case of other names, the local pronunciation has been followed whenever this was ascertainable, the syllables being divided by hyphens.

3. Failing any other indication than the Chinese characters it has been thought best to render these into the Cantonese dialect, which is the one most generally understood throughout the province.

4. For Cantonese, the system of spelling has been borrowed from Eitel and Genähr's Dictionary (with the omission of certain diacritical marks). For Hakka and Hoklo, it has been necessary to adopt the spelling given in the War Office reports. The Hainanese names are those used by the Hainan Branch of the American Presbyterian Mission, while the few Mandarin forms that appear follow the Wade orthography.

As regards pronunciation, it may be said, broadly, that in all the above systems of transliteration the vowels have the same values as in Italian, whereas the consonants are to be pronounced as in English. Both tones and aspirates are of great importance, but the former, at any rate, cannot possibly be acquired except through the medium of the ear, by listening to a competent speaker, and consequently no attempt has been made to indicate them here.

APPENDIX II

GLOSSARY OF CHARACTERS USED IN GEOGRAPHICAL NOMENCLATURE

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
安	An	on	peace
閘	cha	chap	lock, weir
寨	chai	chai	stockade
站	chan	chan	stage, station
長	ch'ang	ch'eung	long
常	ch'ang	sheung	constant
鎮	chên	chan	market town
城	ch'êng	shing	walled city
集	chi	tsap	small town
溪	ch'i	k'ai	mountain stream
七	ch'i	ts'at	seven
家	chia	ka	family, home
嘉	chia	ka	excellent
江	chiang	kong	river
港	chiang	kong	harbour, anchorage
橋	ch'iao	k'iu	bridge
界	chieh	kai	boundary

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
街	chieh	kai	street
前	ch'ien	ts'in	front, before
金	chin	kam	metal, gold
青	ch'ing	ts'ing	green
清	ch'ing	ts'ing	pure
九	chiu	kau	nine
邱	ch'iu	yau	mound, tumulus
州	chou	chau	a 'department' (district or city of the third class)
洲	chou	chau	islet
周	chou	chau	all round, complete
川	ch'uan	ch'ün	stream
莊	chuang	chong	farm, small village
中	chung	chung	middle
二	êrh	yi	two
方	fang	fong	square
房	fang	fong	house
豐	fêng	fung	abundant
府	fu	fu	prefecture (district or city of the first class)
福	fu	fuk	happiness
海	hai	hoi	sea

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
行	hang	hing	row, order
黑	hei	hak	black
河	ho	ho	river, creek, canal
合	ho	hop	junction
後	hou	hau	back, after
西	hsi	sai	west
下	hsia	ha	lower, below
巷	hsiang	hong	side street
小	hsiao	siu	small
縣	hsien	yün	district or city of the fourth class
新	hsin	sun	new
興	hsing	hing	rise, prosperous
湖	hu	wu	lake
黃	huang	wong	yellow
一	i, yi	yat	one
岡	kang	kong	ridge
高	kao	ko	high
溝	kou	kau	nullah, ditch, watercourse
口	k'ou	hau	mouth, port, mountain pass
古	ku	ku	ancient

Character	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
官	kuan	kun	official
關	kuan	kwan	pass, customs barrier
廣	kuang	kwong	broad
貴	kuei	kwai	honourable
歸	kuei	kwai	return
藍	lan	lam	blue
老	lao	lo	old
里	li	li	measure of distance (generally about $\frac{1}{3}$ mile)
梁	liang	leung	beam, plank, bridge
連	lien	lin	connect
蓮	lien	lin	lotus
林	lin	lam	grove, forest
臨	lin	lam	approach
陵	ling	ling	mound
嶺	ling	ling	mountain range, col
六	liu	luk	six
柳	liu	lau	willow
劉	liu	lau	slay, a surname
流	liu	lau	flow
羅	lo	lo	net, sieve

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
樓	lou	lau	storey, tower
路	lu	lo	road
龍	lung	lung	dragon
馬	ma	ma	horse
門	mên	mun	gate
廟	miao	miu	temple
明	ming	ming	bright
木	mu	muk	wood, tree
那	na	na	that
南	nan	nam	south
內	nei	noi	inside
泥	ni	nai	mud
甯	ning	ning	repose, tranquil
牛	niu	ngau	ox, cow
壩	pa	pa	embankment, dam, haul-over
八	pa	pat	eight
白	pai	pak	white
堡	pao	po	rampart, outpost
北	pei	pak	north
平	p'ing	p'ing	level, peace

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
埠	pu, fou	fau	port
浦	p'u	po	reach, tributary, creek
舖	p'u	p'o	shop
三	san	sam	three
沙	sha	so, sho	sand
山	shan	shan	hill, mountain
上	shang	sheung	upper, above
石	shih	shek	stone
十	shih	shap	ten
市	shih	shi	market
雙	shuang	sheung	couple
水	shui	shui	water
所	so	sho	place, fortified camp
司	ssŭ	sz	township
四	ssŭ	sz	four
寺	ssŭ	tsz	monastery, temple
松	sung	ts'ung	pine tree
大	ta	tai	great
塔	t'a	t'ap	pagoda
太	t'ai	t'ai	great, very

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
臺	t'ai	t'oi	terrace, fort
丹	tan	tan	cinnabar, red
潭	t'an	t'am	pool
黨	tang	tong	village
塘	t'ang	t'ong	pond, lake, dyke
道	tao	to	way, road
德	tê	tak	virtue
堤	ti	tai	dyke, embankment
店	tien	tim	inn
天	t'ien	t'in	heaven
廳	t'ing	t'ing	sub-prefecture (district or city of the second class)
頭	t'ou	t'au	head
澤	tsê	chak	swamp, marsh
村	ts'un	ts'ün	village
渡	tu	to	ferry
東	tung	tung	east
洞	tung	tung	hollow, cavern, spillway
子	tzŭ	tsz	a suffix added to some words without changing their meaning.
外	wai	ngoi	outside

Character.	*Pekingese (Wade).*	*Cantonese (Eitel and Genähr).*	*Meaning.*
灣	wan	wan	bay, curve
王	wang	wong	king, prince
衛	wei	wai	garrison, fortified place
武	wu	mo	martial
吳	wu	ng	name of ancient feudal state
五	wu	ng	five
洋	yang	yeung	ocean, foreign
楊	yang	yeung	willow
陽	yang	yeung	male principle, sun, south
陰	yin	yam	female principle, dark
營	ying	ying	camp
園	yüan	yün	garden, enclosure
永	yung	wing	long, eternal

APPENDIX III

LIST OF PLACE NAMES, WITH CHINESE EQUIVALENTS

Aichow, P.	崖州
Ampow, P.	菴埠
Am-shui-t'ang	暗水塘
Ankonghü, P.	銀崗墟
An-zin	安仁
Ao-cheuk. *See* Wushek E.	
Ao-m(ê)ng. *See* Howmoon, P.	
Aptsaipo, P.	鴨仔步
Bak-li	北黎
Bo-deng	寶停
Bue Kiang. *See* Mei Kiang.	
Bueleng, P.	梅隴
Bui-ling. *See* Bueleng.	
Bun-tsü-hie	崩池田
Canton, P. T.	廣州府
Chaikong, P.	寨岡
Chaipin, P.	寨邊
Cham-t'au Pass	枕頭峽
Chanchuen, P. T.	陳村
Ch'ang-hua	昌化
Changning Ki, P.	長甯縣
Chang Shui	章水
Ch'ang-t'ien	長田
Chang-ts'un	樟村
Chan-lan	青藍
Chaochowfu, P. T	潮州府
Chaoyanghsien, P.	潮陽縣
Chap-hau	閘口
Chapli, P.	閘利
Ch'a-t'ing	茶亭
Chê-hü	蔗墟
Ch'e-kong	車岡
Ch'en-ngit	陳仡
Chenping Tung, P. T.	鎮平縣
Chentung, P.	陳洞
Cheongkong, P.	長岡
Ch'e-t'au	車頭
Ch'eung-chau	長洲
Cheung-kong-pa	長江埧
Ch'eung-li	長利
Cheung-t'an	長灘
Chih-k(ê)ng. *See* Chikkung, P.	
Chikhom, P.	赤坎

Chikkung, P. 織貢
Chiknai, P. 赤坭
Ch'ik-shui-hü 赤水墟
Ch'i-kung Mts. *See* Syit-kiang Mts.
Chingkwo, P. 正果
Chingping Tung, P. 清平
Chin-p'in-mi 鎮平尾
Chi-tsz-ch'ung 之字涌
Ch'iu-lin Island 潮連洲
Ch'o-k'ai 初溪
Chongkong, P. T. 長岡
Chonglok, P. 長樂縣
Chongning, P. 長甯縣
Ch'ong-sa-shi. *See* Chongsha E.
Chongsha E., P. 長沙(東)
Chongshatong, P. 長沙塘
Ch'ong-t'ong 長塘
Chowkün, P. 周郡
Chowsin, P. 洲心
Chowtin, P. 周田
Chuan-shui 轉水
Chu-k'êng-t'ang 朱坑塘
Chuk-liu 竹料
Chu Kong 朱江
Chü-na-shi 豬乸市
Ch'ung-hau 冲口
Ch'ung-hau Shui 冲口水
Chung-kok-liang 中角嶺
Chung'oktam, P. 鍾落潭
Chung-sau-t'ong 鍾秀堂
Chungtong, P. 中堂
Chung-yeung-shui-hau 衆陽水口
Ch'un-shui 春水
Chün-yiu-yung 磚窰涌
Chü-t'au-shan 豬頭山
Chü-ting. *See* Ka-deng.

Doa-lo 大路
Dochiu, P. 多蕉
Doki, P. 都騎
Dong-kiu 東郊
Dosing, P. 都城

E-lao 下樓
Êm-kia^{n} 庵須
E-p'ou 下埔

Fachow, P. T. 化州
Fai Shui 飛水
Fangcheng, P. T. 防城縣
Fan-ho-kang. *See* Fên-lou-kong.
Fan-kai (Route 51, mile 156) 飯蓋
Fan-kai (Route 84, mile 54) 分界

Fan-lu. *See* Huang-liu.

Fa-ti 花地

Fatkongting, P. 佛崗廳

Fatshan, P. T. 佛山

Fat-t'o-ling 佛屠嶺

Fau-shan Shui 浮山水

Fau-yang-ts'ün 埠陽村

Fayünshing, P. 花縣城

Fei-lung-hü 飛龍墟

Fêng-ch'i 豐溪

Fengshih, P. 峯市

Fenkai, P. 分界

Fên-lou-kong 範和岡

Fi-loi Shan 飛來山

Fi-loi-sze Gorge 飛來寺峽

Foi-lo 灰爐

Fo Kong 賀江

Fo-yin-kok 火烟閣

Fuchwanhsien, P. T. 富川縣

Fu-hau-hap 虎口峽

Fu Ho 賀河

Fuk-ngau-ling 伏牛嶺

Fuk-po-tseung-kwan-t'an 伏波將軍灘

Fuk-shan 福山

Fuk-u-ts'ün 福烏村

Fu-kwai-t'ong 貫塘

Fungchünyün, P. 封川縣

Fungkong, P. 豐江

Fung-kuan 洪官

Fungshun, P. 豐順縣

Fung-t'au-ling 奉頭嶺

Fung-t'in 鳳田

Fung-wong Kong 鳳凰江

Fung-wong Shui 鳳凰水

Fu-t'iu-shek 虎跳石

Hai-hong. *See* Hoifung.

Hai-t'an 蠏壇

Ha-kai-pai 下界牌

Ha-lat Shan 鰕剌山

Ha-lok 下滐

Hamkwong, P. 洽洸

Ham-shui-k'iu 鹹水橋

Han Kong 漢江

Han-yang River 漢陽江

Ha-po 下步

Ha-p'ou 下埔

Ha-tip 下疊

Ha-tsing 下井

Hawan, P. 下灣

Ha-wo 下和

Hêm-p'a-sheuk 咸扒石
Hengchow, P. T. 橫州
Hê-t'ao 謝道
Heung-lo-hap 香爐峽
Heung-shui 響水
Hingninghsien, P. T. 興甯縣
Hingyeh, P. T. 興業縣
Hin-nen. *See* Hingninghsien, P.
Hoa-kiu 小橋
Ho-hao 河口
Hohow, P. 河口
Hohsien, P. 賀縣
Hoifung, P. T. 海豐縣
Hoihow, P. T. 海口
Hoingan, P. 海晏
Hoiping, P. 開平縣
Hoi-t'au 海頭
Hoi-tou 海頭
Hoi-ying-tsui 海鷹嘴
Ho-k'ai 濠溪
Ho-kau (Route 52, mile 19¼) 壕窖
Ho-kau (Route 52, mile 48¾) 蠔涪
Ho-k'au 河口
Ho-kiu-shi. *See* Hohow, P.
Ho Kong (Route 75, mile 76·8) 賀江
Ho Kong (Route 75, mile 107·1) 合江
Ho-lai. *See* T'u-lai.
Ho-muk-ch'ung 河木沖
Hong-hai Bay 杭海灣
Hong-kong-hü 香江墟
Ho-nyen-t'ap 河源塔
Hopeng, P. 和平
Hopinghsien, P. 和平縣
Ho-p'i-t'ong 河皮塘
Hopo, P, 河婆
Hopshuihü, P. 合水墟
Ho-shon-t'eu 河船頭
Hotin, P. 河田
Ho-t'ou 河頭
Ho-t'ou Shui 河頭水
Hotow, P. 河頭
Hotowhü, P. 河頭墟
Ho-ts'een. *See* Hotin, P.
Hotsuen, P. 河村
Ho-ts'ün 河村
Ho-tu 河渡
Hou-an. *See* Ou-deng.
Howkonghü, P. 後岡墟
Howlik, P. 後瀝
Howmoon, P. 鮜門
Hoyün, P. T. 河源縣

Hsia-chung-chan 下中站
Hsiao-chê 小柘
Hsi-hua Shan 西華山
Hsin-an 新安
Hsin-hsü 新墟
Hsin-ying-ch'ao-shih 新英潮市
Hsiu-jên 修仁
Huang-chu. *See* Ui-diok.
Huang-liu 黃流
Huang Shui 隍水
Hui^{n}-lung 橫龍
Hung-shui Kong 紅木江
Hun-p'ou 仙步
Hun-p'ou Sua^{n} 仙步山
Hwangpo, P. 黃陂
Hwangshahü, P. 黃沙墟
Hweilaihsien, P. 惠來縣
Hweitung, P. 會同縣
Ichang Hun., P. 宜章
Ihop, P. 義合
In-t'ong 燕塘
Jenhohü, P. 人和墟
Ju-hsi 如昔
Junghsien Si, P. 融縣
Kachek, P. 嘉積
Ka-deng 居丁
Kai-hau 街口
Kai-kwan-shek 鷄冠石
Kai-liang. *See* Kiling, P.
Kailung, P. 雞籠
K'ai-ssŭ-hang 溪栖坑
Kai-t'au Ho 界頭河
Kak-chio 角石
Kak-shui 洽水
K'am-ê 墈下
Kam-fung-hang 金豐行
Kam Kong 鑑江
Kam-kong-p'u 錦江埔
Kam-shan-hü 金山墟
Kam Shui 錦水
Kam-ts'ün 甘村
Kam-yan 感恩
Kanchow Ki, P. T. 贛州府
Kan Kiang 干江
Kanlanhü, P. 杆欄墟
Kan-leung 緊瀧
Kao-k'iu 舊橋
K'ao-k'oi 古溪
Kao-ling-hsün 高嶺汎
Kaotong, P. 蛟塘
Kao-tsêng. *See* Kotsanghü.

Kapchi, P. 甲子
Kap Shui 甲水
Kat Ho 吉河
Kau-t'au-t'an 狗頭灘
Kau-wei-yau-t'an 狗尾泅灘
Kaying, P. T. 嘉應州
K'ei-chi-k'e[n]. *See* K'ai-ssŭ-hang.
K'ei-tung 溪東
Kêm-li-hü 金里墟
Kêm-ts'ün 金村
Kia-lat 碕碌
Kianfu, P. T. 吉安府
Kiang-ha-t'ap 崗下塔
Kianghwa, P. T. 江華縣
K'ih-nam 溪南
Kiling, P. 岐嶺
Kimkang, P. 金江
Kim Kong 劍江
Kim-sing 金廂
King-lui Shui 警雷水
King-t'ong 京塘
King-ts'ün 京村
Kinki Si, P. 金雞
K'in-leng Shui 乾零水
Kiong Shui 姜水
Kit-ch'iek. *See* Kitchioh.
Kitchioh, P. 碣石
K'it-ie[n]. *See* Kityang, P.
Kit-lêm-t'am 杰藍潭
Kit-lung 吉隆
Kityang, P. 揭陽縣
Kiu-chau 舊州
Kiungchow, P. T. 瓊州府
Kiung-shui-kok 轉水角
Kochow, P. T. 高州府
Koi-mon 岐門
Koi-ts'un 開村
Ko-ka-t'in 高家田
Kok-mi 角尾
Ko-lan-tung 高欄棟
Ko-leng Shui 高梁水
Kong-hau (Route 48, mile 83¼) 江口
Kong-hau (Route 56, mile 13) 江口
Konghow, P. T. 江口
Konghowhü, P. 江口墟
Konghow Tung, P. 江口
Kong-kên 江根
Kongmi, P. 岡美
Kongmoon, P. T. 江門
Kong-sui 隆水
Kongtsun, P. 江村

Kong-wan	江灣
Konkong, P.	乾江
Kon-t'ai-shi	乾體市
Kon-t'ong-shi.	*See* Kuntong, P.
Kon-yim-kok.	*See* Kunyumkok, P.
Kopi, P.	高陂
Ko-san Yiu	高山猺
Ko-shan-ling	高山嶺
Ko-shan-ts'ün	高山村
Ko-tak	高德
K'o-t(ê)ng	可塘
Kotong, P.	高塘
Kotsanghü, P.	高增墟
Ko-ts'ün	高村
Kou-mei-t'ao	高尾道
Kou-p'ou	高袍
Kow-kwan	九官
Kuan-p'u-t'ou	官浦頭
Kuchuk, P.	古竹
Ku-chuk-p'ou	姑竹埔
Kuên-t'ai	廣泰
Kuk-hü	谷墟
Kuk-k'i.	*See* Kukoi, P.
Kukoi, P.	曲溪
K'uk-sha	曲沙
Ku-leung	古良
Ku-lu-hü	古祿墟
Kumchuk, P.	甘竹
Kumkai, P.	金溪
Kumshanhü, P.	金山墟
Kum-tau	金兜
Kum-tau-t'au	金兜頭
Kun cheong, P.	官昌
Kungchow, P.	恭州
Kungping, P.	公平埠
Kungyifow, P.	公益埠
Kun-po	官浦
Kuntong, P.	官塘
Kun-yêm-hang	觀音坑
Kunyiu, P.	官窰
Kunyumkok, P.	觀音閣
Kushui Tung, P.	古水
Kwai-lam	桂林
Kwai-shin	歸善
Kwaitsuihü, P.	龜嘴墟
Kwanfow, P.	關埠
Kwantsin, P.	關前
Kwaposun, P.	瓜步汛
Kweihsien, P. T.	貴縣
Kweitam, P.	葵潭
Kwong-ho-hü	廣和墟
Kwongli, P.	廣利

Kwongning, P. 廣甯縣
Lai-chee-do 黎治都
Lai-hu-t'ong 賴古塘
Lai-pou-t'au. *See* Liputow.
Laitung 黎洞
Lakchukhü 勒竹墟
Laklow, P. 勒樓
Lam-hang 欖坑
Lamhow, P. 藍口
Lam-shan 欖山
Lam-tung 林東
Lang-sui 冷水
Lang-t'an 浪灘
Lang-t'in-kai 冷田街
Laolung, P. 老隆
Lao-sha 老沙
Lao-tsun 老村
Lau-hü 老墟
Lau-kung-hü 劉公墟
Lau-sha 老沙
Lao-shang. *See* Lowshing, P.
Lau-ts'un 老村
Leem-hang-chi 林坑子
Leem-ü-t'ong 廉魚塘
Leen-t'ong 蓮塘
Leitsuen, P. 裏村
Le-kung-p'ing 雷公平
Lengkang, P. 隆江
Leng-lau 龍樓
Leu-hau 嶺口
Leunghowhü, P. 良口墟
Leungkatan, P. 兩家灘
Leungkwong, P. 良光
Leung-lung-chang-chü 兩龍爭珠
Leunglunghü, P. 兩龍墟
Leung-ngit 梁仈康
Lia-mui. *See* Ling-mên.
Liangking, P. 良慶
Liang-p'ai-t'an 兩牌灘
Liangtsun, P. 梁村
Liang-tun Shan 兩墩山
Li-ch'i. *See* Lok-ki.
Li-chih-shan. *See* Ling-mên.
Lien-t'ang 連塘
Li-fu. *See* Liwu, P.
Limchowfu, P. T. 廉州府
Lim-hang-tzŭ 林坑子
Limko, P. 臨高縣
Lin-ch'-ên Shui. *See* Ma-ch'ên Shui.
Linchow, P. 連州
Lin-chow-ping 連州坪
Ling-kan-tsi 嶺脚市

Ling-k'ou. *See* Leu-hau.
Ling-kwai 靈歸
Ling-li 伶俐
Ling-mên 嶺門
Lingshan, P. T. 靈山縣
Ling-shan-miu 靈山廟
Lingshuihsien, P. 陵水縣
Ling-t'an 靈潭
Ling-tao-ha 嶺頭下
Ling-t'ien-chieh. *See* Lang-t'in-kai.
Ling-yang Gorge 羚羊峽
Lin-kao. *See* Limko, P.
Linkiang, P. 臨江府
Linpingchow, P. 連平州
Linshanting, P. 連山廳
Lin-t'ong 蓮塘
Lintong, P. 蓮塘
Lintongsunhü, P. 蓮塘新墟
Liputow, P. 犂步頭
Liu River 柳江
Liung-chih 龍謝
Liung-ch'on. *See* Lungchün, P.
Liuwong, P. 溜隍
Liwu, P. 鯉湖
Lo-chi. *See* Lok-ki.
Lo-fau Mts. 羅浮山
Lo-fou 羅浮
Lo-Hak (Old Hakkas) 老客
Loi aborigines 黎人
Lo-k'ai Shui 盧溪水
Lokchong, P. 樂昌縣
Lok-ki 黎圮
Lo-kong (Route 37, m. 52) 螺岡
Lo-kong (Route 48, m. 40½ 羅江
Lok-shui 涤水
Lok-ts'ün 樂村
Lokwei, P. 樂會
Lo-mung-ts'ung 羅蒙葱
Long-ma 龍馬
Long-san. *See* Lung-shan.
Lotingchow, P. T. 羅定州
Lo-ting-hau 羅定口
Lo-ti-wan 老地灣
Lo-tsai-song 老仔桑
Lo-tu-sz: *See* Lou-ka-tou 羅渡司
Lou-fu-cheung 老虎腸
Lou-ka-tou 羅家渡
Lo-va 龍馬
Lowshing, P. 柳城
Lo-yi 羅衣
Luchwan, P. 陸川
Luichow, P. T. 雷州府

Luiko, P. 雷高
Luikong, P. 蠳岡
Lui-kung-hiung 雷公坑
Lu-k'ai 路溪
Lukfung, P. 陸豐縣
Lukfung R. *See* Tam Shui.
Luk-kai-shui 綠溪水
Lukpo, P. 祿步
Lukpo Canal 鹿步河
Lukto, P. 六都
Lukuk, P. 陸屋
Luk-wai-tsun 陸惠村
Lungchow, P. T. 龍州廳縣
Lungchün, P. 龍川
Lung-fa-he 龍發墟
Lung-fu-t'au 龍虎頭
Lung-kong River 龍江水
Lungkonghü, P. 龍岡墟
Lung-kong-hü 龍岡墟
Lung-kuan 龍滾
Lungkwaihü, P. 龍歸墟
Lung-kwai Shui 龍歸水
Lung-ma. *See* Lo-va.
Lungmoonyün, P. 龍門縣
Lung-nga Pass 龍牙峽
Lung-ngan 龍眼

Lung-shan 龍山
Lung Shui 龍水
Lung-shun-kong 龍船岡
Lung-tai 龍地
Lungtam, P. 龍潭
Lung-t'am-ha 龍潭峽
Lung-t'an-p'u 龍潭舖
Lung-t'au-ch'ai 龍頭寨
Lung-t'au-ngam 龍頭巖
Lung-t'au Shan 龍頭山
Lung-t'au-ying 龍頭影
Lungwahü N., P. 龍華墟(北)
Lupao, P. 蘆苞
Lu-pong 羅旁

Ma-cha 蔴榨
Ma-ch'ên Shui 麻陳水
Ma-hau 馬口
Ma-hü 馬墟
Maiho, P. 邁號
Mai-to 美珠
Makong, P. 馬崗
Makung, P. 媽宮
Mak-yeung Shui 墨陽水
Ma-ling 馬嶺
Ma-mien-t'an 馬面灘

Ma-miu Pass 馬廟峽
Manchongkiu, P. 文昌橋
Man-mo-miu 文武廟
Man-wa College 萬華學
Maon, P. 馬安
Ma-on-kong 馬安崗
Mao-yi-t'au 猫兒頭
Mapa, P. 馬壩
Ma-po 麻步
Ma-po-shui 馬步水
Ma-pu-t'an 馬步灘
Mashan, P. 蒜汕
Mashui, P. 馬水
Ma-su 馬嶼
Ma-t'o 麻土
Ma-ts'e 馬斜
Ma-tsz-hü 馬子墟
Ma-tsz Shan 馬子山
Mau-i-shek 猫耳石
Mei-chu. *See* Mai-to.
Mei Kiang 梅江
Mei-ling (pass) 梅嶺
Mei-ling-chüeh 梅嶺絕
Miao-mên-t'an 廟門灘
Mienfu, P. 棉湖
Min-ou. *See* Mienfu.

Miu-tam 廟潭
Miu-tsz-kok 廟子角口
Mo-lam-hau 武林
Moli, P. T. 武利
Mo-lok Shui 武樂水
Mong-chuen 望村
Mongfukong, P. 望夫崗
Mong-fu Shan 望夫山
Mongkong, P. 濛江
Mong-tsai-hap 盲仔峽
Mou-t'an-tai 茂壇低
Mui-fa-chuen 梅花村
Muiluk, P. 梅菉
Muk-k'ai 木溪
Muk-min 木棉

Nai-pik-t'an 泥壁灘
Nai-shui-ts'ün 泥水村
Nalai, P. 那麗
Nalung, P. 那龍
Nam-doa 南大
Nam-fong 南豐
Nam-hang 南坑
Namheung, P. 南鄉
Namhong, P. 南康
Nam K'ai 南溪

Nam Kong 南江
Namkong 南岡
Nam-lu 南閭
Namshing, P. 南盛
Nam-suan 南山
Nam-to River 南渡水
Namtong W. 南塘(西)
Na-mung-hü 那蒙墟
Na-mung R. 那蒙江
Nam-wa Monastery 南華寺
Namyung, P. T. 南雄州
Nananfu, P. T. 南安府
Nanchang, P. T. 南昌府
Nan-lu-shik. *See* Nam-lu.
Nanning, P. T. 南寧府
Nao-t'eu-shak 牛頭石
Na-shê 那舍
Na-tan 那旦
Na-wong-shan 那望山
Na-yu. *See* No-yo.
Na-yung. *See* No-yang.
Ngaihow, P. 崖口
Ngaimoon 崖門
Ngao-li-ting 五里亭
Ngao-neeng 牛嶺
Ngau-kai-hsün 鰲溪汎
Ngau-kok 牛角
Ngau-kong-hü 牛江墟
Ngau Kong 牛江
Ngau-lan 牛欄
Ngau-p'i-t'ong 牛皮塘
Ngau-p'i-tung 牛皮洞
Ngauwan, P. 牛灣
Ngayiu, P. 雅瑤
Ng-chi-shim-suan 五指中山
Ngchünyün, P. 吳川縣
Ngêt-tsai-t'ong 兀仔塘
Ng-fu-t'eu 五虎頭
Ngiu-p'ei-lek 牛皮樂
Ngong-fu 仰湖
Ngong-t'iu 徑頭
Ngong-t'ong 徑塘
Ngotow, P. 鰲頭
Ngun-pang-suan 銀峯山
Ngun-suan 銀山
Ngutow, P. 鰲頭
Nimshan, P. 棯山
Niu-ai-shih 牛挨石
Niu-kiu-shak 午古石
No-dia (Na-shê) 那舍
Nodoa 那大

Noi^{n}-hue-sua^{n} 內海山
No-lak 和樂
No-yang 那邕
No-yo 那柚

Om-p'ou 菴浦
On-hau 安口
Onpo, P. T. 安舖
O-t'ao. *See* Ngutow.
Ou-deng 后安

Pak-sha (Route 57, mile 44¼) 白沙
Paksha, P. 白沙
Paksha W., P. T. 白沙(西)
Pakshasunhü, P. 白沙新墟
Pak-shek (Route 33, mile 13·3) 伯石
Pak-shek (Route 44, mile 5) 白石
Pak-shek (Route 52, mile 51½) 白石
Pak-shek-p'o 白石鋪
Pak-shek Shan 白石山
Pak-shek-shui 白石水
Pakshektam, P. 白石潭
Pak-shek-yiu 白石窰
Pak-shui-t'ong (Route 75, mile 14·1) 白水塘
Pak-shui-t'ong (Route 75, mile 71) 白水塘

Pak-tai-ngam 北地巖
Pak-t'ang-ling 白籐嶺
Pakto N., P. 白土(北)
Pakto W., P. 白土(西)
Pak-yeung Shui 白羊水
P'an-ch'iao-hsü 板橋墟
P'an-ku Pass 盤古山
Pao Shui 保水
Paotai, P. 砲台
Pao-t'ing. *See* Bo-deng.
Pao-yang Shui 抱漾水
Pa-so-tun 八所墩
Pat-kap 八甲
Pat-ka Shan 筆架山
Pat-kok-t'ap 八角塔
Patow, P. 壩頭
Pa-ts'un 巴村
Pekkong, P. 碧江
P'êk-shu 柏樹
Pêng K'ai 楓溪
Pêng-k'ao 楓口
Pêng-k'êm 崩欠
Piang-ts'un-shi. *See* Pingtsün, P.
Pi-chia Shan 筆架山
P'ien-ch'ung 扁涌
Pi-kao 陂溝

Pik-kong 碧江
Pik-lok-tung 碧落洞
P'in-fu. *See* Pingwu, P.
P'ing-ching-ssŭ 平正司
P'ing-fuk 平福
Pinghai, P. 平海
Pinghwo, P. 平和縣
Pingkuthü, P. 平吉墟
P'ing-lang-hü 平朗墟
Ping-nam 平南
Ping-nam-lin 平南林
Pingnamyün, P. T. 平南縣
P'ing-ngan-hü 平銀墟
P'ing-po 平圃
P'ing-shan-hü 平山墟
Pingshanhü, P. 平山墟
P'ing-shan-ts'ün 平山村
Pingshek, P. T. 坪石
Pingtan, P. 平坦
P'ing-ti Yiu 平地猺
Pingtsün, P. 丙村
Pingwu, P. 平湖
P'in-san 坪山
Pi-sui. *See* Pa-ts'un.
Pit-t'ap 筆塔
Poi-sui 貝水
Poklo, P. T. 博羅縣
Po-kong 步江
Pokpak, P. 博白縣
Polo, P. 菠蘿
Po-lo-hang Creek 波羅坑水
P'o-mi Ho 坡尾河
Po-on 保安
Poseh, P. T. 百色廳
Po-sim 埔心
P'o-t'an 坡頭
P'o-tsai 坡仔
P'o-tsai-hü 舖仔墟
Potsin, P. 埔前
P'ou-bui 埔尾
Pou-lo 布羅
P'ou-ning. *See* Puning, P.
Pumiao, P. 蒲廟
Puning, P. 普甯縣
Pun-lung 蟠龍
Pun-shui-ao 半水阿
Putangsü, P. 蒲塘墟
P'u-t'ien 蒲田

Saiking, P. 西境
Sai-kong-mei 西江尾
Sainam, P. 西南
Sai-ngau-t'am 西牛潭
Sai-ngon 西岸

Saining, P. 西甯縣
Sai Shui 西水
Sai-wa Monastery 西華寺
Sai-yan 西演
Samah, P. 三亞
Samchau Inlet 三洲灣
Sam-chau-t'an 三洲灘
Samchowhü, P. 三洲墟
Sam-fat-miu 三佛廟
Sam-hap 三峽
Samhopa, P. 三河壩
Sam-ka-t'ong 三家塘
Sam-k'iu 三橋
Samkong N., P. 三江(北)
Samkong S., P. 三江(南)
Samkong W., P. 三江(西)
Sam-kong-k'iu 三江橋
Sam-lei-t'ong 三里堂
Sam-liu-t'ong-sun 三了塘汎涌
Sam-miu-ch'ung 三廟廟
Sam-neung-miu 三娘廟
Sam-shap-li-ch'eung-t'an 三十里長灘
Samshui, P. T. 三水縣
Samtohü, P. 三多墟
Sam-tou-chuk 三多祝
Sam-wa-tin 三華店

Sam-yuen-kong 三元岡
San-chiang 三江市
San-fung 三峯
Sang-hoe. *See* Ch'ang-hua.
San-mên-t'an 三門灘
San-pan-ch'iao 三板橋
Sa-po 沙浦
Sap-sek-yüen 十石遠
Seen-long 鮮龍
Seen-ts'en 新田
Sen-ch'ung 新涌
Sên-lou-ts'ün 新路村
Sên-shan-shih 森山市
Sên-tsun 新村
Seung-tip 上疊
Shahochai, P. 沙河寨
Shahow N., P. 沙口(北)
Shahow S., P. 沙口(南)
Shakao, P. 沙滘
Shak-ha-pa 石下壩
Shak-kung-shin 石公神
Sha-kong 沙崗
Shàkong, P. 沙崗
Shak-tu 石道
Shalong, P. 沙瑯
Shameen 沙面

Sha-mei 沙尾
Sha-mo-ling 紗帽嶺
Shang-chung-chan 上中站
Shang-p'iang 村平
Shan-hau 山口
Shan-hau-ts'ün 山厚村
Shanhow, P. 山口
Shan-shui 山水
Shan-t'au. *See* Swatow, P.
Shan-t'ong 山塘
Shan-ts'in 山前
Shan-ts'un 山村
Sha-p'ing-kong-hau 沙平江口
Shapo, P. 沙坡
Shap-yi-lo-san 十二羅傘
Sha-tak 沙達
Sha-t'au 沙頭
Shatowkok, P. 沙頭角
Sha-ts'ün (Route 34, mile 20¼) 沙村
Sha-ts'ün (Route 75, mile 63·8) 沙村
Sha-tsz-kong 沙子岡
Sha-wok 沙鑊
Sha-yü-chung 沙魚倉
Shayün, P. 沙浕
Shekchaihü, P. 石寨墟
Shekchung, P. 石埇
Shek-hok 石壳
Shek-kan 石澗
Shekkok, P. 石角
Shek-kok 石角
Shekkokhü, P. 石角墟
Shek-kong 石港
Shekkong, P. 石康
Shekkow, P. 石狗
Shekku, P. 石鼓
Shek-li-t'ong 石梨塘
Shek-ling 石嶺
Shek-lung 石龍
Sheklung, P. T. 石龍
Shekmoon, P. 石門
Shek-mun 石門
Shek-pai-hang 石碑杭
Shekpan, P. 石板
Shekpik, P. 石壁
Shekshing, P. T. 石城縣
Shek Shui 石水
Shektan, P. 石灘
Shek-t'ao 石頭
Shektsing, P. 石井
Shektsing Creek 石井河
Shektsui, P. 石嘴
Shekwan E., P. 石灣(東)

Shekwan W., P. 石灣(西)
Shek-yan 石人
Shenkong, P. 神崗
Sheong-sia-wan 上沙灣
Sheong-ti templ 上帝廟
Sheungfung, P. 上鳳
Sheung-kao Shui 雙澆水
Sheung-nai 雙泥
Sheung-po-tong Kai 上堡東溪
Shin-am 新菴
Shingkow, P. 新口
Shing-nam 城南
Shingping, P. 城平
Shing-sin-tung 昇仙洞
Ship-sam-hiong 聖三鄉
Ship-tsz-lou 十字路
Shiuchow, P. T. 十州府
Shiuhing, P. T. 韶慶府
Shiu-kwan. *See* Shiuchow. 韶關
Shonglok, P. 常樂
Shui-hau (Route 36, mile 83) 水口
Shui-hau (Route 55, mile $7\frac{1}{4}$) 水口
Shui-hau (Route 69, mile 9) 水口
Shui-hau-hü 水口墟
Shui-heu-shi. *See* Shuihow, P.
Shuihow, P. 水口
Shuihowhü, P. 水口墟
Shuikow Tung, P. 水口灘
Shui-mun-t'an 水門
Shuinam, P. 水南
Shui-sai 水西
Shui-ts'ing 水清
Shuitung, P. T. 水東
Shumkai, P. 岑溪
Shun-fau 船埠
Shun-on-hü 順安墟縣
Shun-tak 順德河嶺
Shun-tak Branch 順德頭
Shwang-shui 雙水
Siang Kiang 湘江
Si-fu 西湖
Sin-fung Kong. *See* Siu Kong. 新豐江
Singtsz, P. 星子
Sin-hing 新英
Sin-hü 先墟
Sin-k'iu 新橋
Sin-liao-k'iao 新料橋
Sin-liung-t'ap 新龍塔
Sin-p'ing 新坪

Sin-t'ong	新塘
Sintsün, P.	仙村
Si-t'ong	西塘
Siu-cheung	小樟
Siukong, P.	小江
Siu Kong	小江
Siulam W., P.	小欖(西)
Siu-low	小樓
Siupin, P.	蕭邊
Siu-siang-hap	小湘峽
Siu-tan-hang	小舟行
Siu-t'in-hü	小田墟
Siutong, P.	小塘
Siutung, P. T.	小董
So-ts'ün	蘇村
Suikai, P. T.	遂溪縣
Sui Kong	綏江
Sui-tsak	水澤
Sü-kong	胥江
Sun-cheon	新川
Sunchong, P. T.	新昌
Sünchow, P. T.	潯州府
Sung-kim	雙金
Sungkong, P.	松岡
Sung-po-hsün	松柏汛
Sunhing, P. T.	新興縣
Sun-hü	新墟
Sunhü, P.	新墟
Sunkiu, P.	新橋
Sun-k'iu-hü	新橋墟
Sunon, P.	新安
Sun-sha	新沙
Sun-sin-k'iu	新仙橋
Suntong, P. T.	新塘
Sun-ts'ün	新村
Suntu, P.	新渡
Sunwui, P.	新會縣
Su-t'in	蘇田
Süwenyun, P. T.	徐聞縣
Swabue, P.	汕尾
Swatow, P. T.	汕頭
Syit-Kiang Mts.	七指山
Szelinghü, P.	獅嶺墟
Sz-heung-ha	四鄉下
Sz-p'i	思皮
Szetzetow, P.	獅子竇
Szewui, P.	四會縣
Sz-kun-po	四官步
Sz-seung-t'an	四湘灘
Taan, P.	大安
Tai-cheung	大樟

Tai-hang-hau 大坑口
Tai-hap 大峽
Tai-kan 大簡
Tai-kang 大逕
Taikiu, P. 大橋
Taileung, P. T. 大良
Tai-liang-fu. *See* Toa-liung-p'u.
Tailik, P. 大瀝
Tailin, P. 大蓮
Tai-long-tai 大朗地
Tai-lou-shün 大路船
Tailung, P. 大龍
Taima, P. 大麻
Tai-miu-hap 大廟峽
Tai-p'ang-shing 大鵬城
Taipathü, P. 第八墟
Taipat Shui 第八水
Taipingchong, P. 太平塲
Taipinghü N. 太平墟(北)
T'ai-p'ing-to 太平都
Tai-pin-ling 大片嶺
Taipuhsien, P. 大埔縣
Tai-p'ung-pin rapids 大蓬辨灘
Taishahü, P. 大沙墟
Tai-shan-t'ong 大山塘
Tai-sha-t'au 大沙頭
Taishek, P. 大石
Tai-shek-yung 大石涌
Tai-siang 大湘
Tai-ting Temple 大鼎廟
Tai-t'o Shui 大肚水
Taitun, P. 大敦
Tai-tung 帶洞
Taiwan, P. 大灣
Taiwan S., P. 大灣(南)
Tai-wong (Route 48, mile $123\frac{3}{4}$) 大旺
Tai-wong (Route 51, mile 95). *See* Konghow, P. 大黃
Tai-wong Kong 大黃江
Tai-wong-miu 大王廟
Taiwu, P. 大烏
Tai-wu-kong 大烏岡
Takhing, P. T. 德慶州
Ta-kio-miao 大角廟
Tak-yi Lake 特侶塘
Ta-lu. *See* Doa-lo.
Ta-mao Shan 大帽山
Tamchow Channel 潭洲河
Ta-miu-ha 大廟峽
Tam-kat 潭吉
Tam-ko. *See* San-chiang.
Tam Kong 潭江

Tamoa, P. 潭澳
Tam Shui 淡水
Tamshui, P. 潭水
Tamshuihü, P. 淡水墟
Tam-t'ong 淡塘
Tanchow, P. 儋州
Tanchuk, P. 舟竹
Tan-chuk Kong 舟竹江
Tang-hai. 東海
Tanhü, P. 檀墟
T'an-k'ou 潭口
Tanpo, P. 炭步
Tanshuihow, P. 單水口
T'an-t'au-ts'un 漢頭村
T'an-tze-ki 彈子岐墟
Taokiasü, P. 道家墟
Tao-t'ao-k'a 斗頭卡
T'ao-t'ên 頭屯
Tatang, P. 大塘
Tat-hao-p'u. *See* Tathowfow.
Tathowfow, P. 達濠埠
Tatseh, P. 大澤
T'au-k'ai 陶溪
Tau-mun 斗門
Tawanhü Si, P. 大灣
Ta-yuen. *See* Toa-hng.

Tei-kong 艇江
Tên-fu 頓富
Teng-wu Mts. 鼎湖山
Tengyün, P. T. 藤縣
T'ieh-ch'ang. *See* Titcheong.
T'ien-hau 田口
T'ien-sim 田心
Tikhoi, P. 荻海
Tingan, P. 定安縣
Tingchowfu, P. T. 汀州府
T'ing-tsz-hü 亭子墟
Tin-heng. *See* Hsin-an.
T'in-ho 天河
Ti-nin Shan 㘭涿山
Tinpak, P. T. 電白縣
Tin-shui 典水
Tin-si 新市
Tintong, P. 天堂
T'ip-fuk 疊福
Titcheong, P. 鐵塲
Titkao, P. 豐滘
T'it-kong (Route 34, mile 65) 鐵岡
T'it-kong (Route 36, mile 103) 鐵崗
T'it-shan 鐵山
Toa-an. *See* Taan, P.

Toa-hng 大坑
Toa-ka 大窖
Toa-liung-p'u 大嶺布
Toa-pa 大埧
To-fêng-shih 多峯市
Tong-ee-ts'oi 當而財
Tonghang, P. 湯坑
Tong-kiu 藤橋
T'ong-lok 塘勒
Tong-mei. *See* Tongmihü, P.
Tongmihü, P. 塘尾墟
T'ong-pin 堂邊
Tongtong, P. 湯塘
Togwha, P. 塘頭廈
T'ong-yêm-ngêm 塘音巷
Tsaitangshi, P. 彩塘市
Tsak-shak 赤石
Tsam-pan-hü 砧板墟
Ts'at-kung Shui 七鞏水
Ts'at-li Pass 七里峽
Ts'at-li-p'o 七里舖
Ts'at-nei-fu. 七女湖
See Tsatyüwu, P.
Tsatpak, P. 七白
Ts'at-sing-ngam (Route 48, mile 30½) 七星岩
Ts'at-sing-ngam (Route 51, mile 222) 七星巖
Ts'at-sing-ngon 七星岸
Tsatyüwu, P. 七汝湖
Ts'een-tsen 錢村
Tse-kam 赤坎
Ts'e-mun 斜滿
Tsêng Kong (Route 36) 增江
Tsêng River (Route 59) 滇水
Tsengshinghsien, P. 增城縣
Tse-pan 車板
Tsiahang, P. 畬坑
Tsiang-kwun 將軍
Tsiang-kai 青溪
Tsim-kok-lung 尖角龍
Tsim-kok-shui 尖角水
Ts'ing-k'ai, R. S. 清溪
Tsingki, P. 青岐
Ts'ing-lao-êm 青爐掩
Tsinglin, P. 菁蓮
Tsingmai, P. 澄邁
Ts'ing-p'ing-kuk 清平角
Ts'ing-shui-kong (Route 74, mile 3·8) 清水崗
Ts'ing-shui-kong (Route 83, mile 20¾) 清水江
Tsing-yang Gorge 滇陽峽
Ts'ing-yüan Ho 清遠河
Tsingyün, P. T. 清遠縣

Ts'in-kong 錢江
Tsin-to 剪刀
Ts'iu-hiong 秋香
Ts'iu-hiong Kong. 秋香江
See Wingon Kong.
Ts'iung-k'eu. *See* Tsungkow, P. T.
Tsiu-t'ong 舊塘
Tso Kong 左江
Tsung-kong-hau 總江口
Tsungkow, P. T. 松口
T'sz-ku-t'ong 刺古塘
Tu-an-p'u 都安舖
T'u-lai 土來
Tu-lok-hü 都樂墟
T'un-ch'ang 屯昌
Tung-chiao-shih. *See* Dong-kiu.
Tunghang, P. 東坑
Tung-hau 洞口
Tungheung, P. 東鄉
Tunghing, P. T. 東興
Tung-hoi Ho 東海河
Tung-k'ai Shui 東溪水
T'ung-k'i-ssŭ 通衢司
Tung-k'iu Shui 東橋水
T'ung-ku-chau 銅鼓洲
Tungkun, P. T. 東莞縣
T'ung-ku-t'an 銅鼓灘

T'ung-li Shui 通利水
T'ung-ming-sun 通明汎
T'ung-mun 潼門
Tung-mun-p'o 東門舖
Tungon, P. 東安縣
Tungpi, P. 東陂
Tung-po 東駁
Tung Shui 東水
T'ung Shui 銅水
Tungtsun, P. 東津
T'ung Wu 潼湖
T'un-lu-hü 屯蘆墟
Tun-t'an Shui 頓吞水
Tun-t'ao 墩頭
T'u-ts'un 途村
Tzeliang, P. 自良
Tzenaiheung, P. 紫坭鄉
Tzetung, P. 紫洞

Ui-diok 黃竹
Ui-hung. *See* Hweitung, P.
U-long-ts'ün 烏郎村
U-shek 烏石
U-tei-kok 烏地角
Ü-yang-t'iu 魚羊頭

Vang-chiu 萬州

Van-leng 萬陵
Vun-siang. *See* T'un-ch'ang.
Vun-sio. *See* Mencheong, P.
Waichow, P. T. 惠州府
Wai-loi. *See* Hweilaihsien.
Wai-lung 廻龍
Wai-lung-hü 廻龍墟
Wai-lung-kong-hau 渭龍江口
Wai-shun 梅村
Waitsap, P. 懷集縣
Wan-fung 雲峯
Wang-ho 橫河
Wanglik, P. 橫瀝
Wang-lou 望樓
Wang-san 橫山
Wan-mun Shan 雲門山
Watlam, P. T. 鸞林州
Wa-t'ong-hü 瓦塘墟
Whampoa, P. T. 黃埔
Wing-on 永安
Wingon, P. 永安
Wingonchow, P. 永安州
Wing-on Fort 永安砲台
Wingon Kong 永安江
Wingshun, P. T. 永淳縣
Wing-ting. *See* Yun-t'in.
Wingtsing, P. 永清
Wing-wo 永和
Wingwu, P. 永湖
Wo-lei-t'ong 和利塘
Wong-ch'a 橫查
Wongchukki, P. 黃竹岐
Wong-chuk Kong 黃竹江
Wong-fa Kong 皇華江
Wong-hang 黃坑
Wong-kam rapids 黃金灘
Wong-ka-san River 黃家山江
Wong-kong 橫崗
Wongkong N., P. 黃崗(北)
Wongkong S., P. 橫江(南)
Wong-kong-hü 黃岡墟
Wongkonghü, P. 黃岡墟
Wong-kong-sha 黃江沙
Wong-leuk 黃畧
Wonglin, P. 黃連
Wong-mau Pass 黃茅峽
Wong-mou 王母
Wongnaiwan, P. 黃泥灣
Wong-ngau rapids 黃牛灘
Wong-pu 黃埠
Wong-sa-t'am 黃沙潭
Wong-sha (Route 22, mile 13¾) 黃沙

Wong-sha (Route 37, mile ½) 黃沙
Wong-sha (Route 37, mile 4½) 橫沙
Wong-shak 橫石
Wong-sha-t'ao 黃沙頭
Wongshek, P. 橫石
Wong-t'in 黃田
Wongtin, P. 黃田
Wong-ting 黃鼎
Wong-to-hang 黃土坑
Wong-tong 橫塘
Wongtong E., P. 黃塘(東)
Wong-tung-hau 黃洞口
Wu-ch'a 烏槎
Wuchow, P. T. 梧州府
Wuchung, P. 烏涌
Wuka, P. 烏家
Wu-k'am 烏墈
Wukingfu, P. 五經富
Wu Kong 武江
Wu-li-t'ing. *See* Ngao-li-ting.
Wunlum, P. 雲林
Wushek, P. 烏石
Wushek E., P. T. 烏石(東)
Wu shui 武水

Yamchow, P. T. 欽州
Yanfa, P. 仁化縣
Yang-mei. *See* Yo-boe.
Yanping, P. T. 恩平縣
Yanwohü, P. 仁和墟
Ya Shan 叉山
Yau-cha-t'an 油榨灘
Yen-fu. *See* Wingwu, P.
Yen-lok 雲落
Yen-tun 烟墩
Yeungchun, P. 陽春縣
Yeung-k'ai 楊溪
Yeung-king 羊逕
Yeungkok, P. 羊角
Yeungkong, P. T. 陽江廳
Yeung-kwai 楊桂
Yeung-lan-t'ap 陽蘭塔
Yeung-mui 楊梅
Yeungmui W., P. 楊梅(西)
Yeung-muk 楊木
Yeung-pin 洋邊
Yeung-p'un 楊番
Yeungshan, P. 陽山縣
Yeung-t'an 楊壇
Yeung-t'iu Pass 羊跳峽
Yimpo, P. 鹽步
Yin-ch'i-t'ang 銀溪塘
Ying-lo Bay 英羅港

Yingtak, P. T. 英德縣
Ying-tsui, R. S. 迎嘴車站
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Yu Kong 榆林港
Yu-lin-kan 永州府
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APPENDIX IV

CURRENCY, WEIGHTS, AND MEASURES

THE subject of currency, weights, and measures is dealt with in a separate chapter in *China*, Vol. I. It is only necessary here to treat it summarily and with special reference to the province of Kwangtung.

CURRENCY

In Kwangtung, as elsewhere in China, the principal standard of currency is the **cash,** a small coin made of copper alloy, round in shape with a square hole in the centre and about the size of a halfpenny. Its nominal value is $\frac{1}{1000}$ of a tael. The cash are made up into rolls of 100 and the string of cash (tiao) contains 10 rolls or nominally 1,000 cash. But the money changers make a charge for the labour and string used in threading and deduct a certain number of cash from each 100, the result being that a tiao in actual practice is always 20 to 30 coins short of the 1,000 though it none the less counts for 1,000 cash.

In country villages and in remote parts it is still necessary to deal in this cumbersome medium of exchange ; but in the towns and centres of trade coins of larger value and paper notes are in general use.

The **tael** is a silver unit and is not a coin but rather a weight equivalent to about $1\frac{1}{3}$ oz. of silver. Its theoretical value is 1,000 cash. There are numerous denominations of tael varying considerably in weight and fineness of metal. The principal ones are the Ku-ping (or Treasury) tael, the Tsao-ping (or tribute) tael, and the Haikwan (or Maritime Customs) tael, all of which have a more or less constant value. But for ordinary commercial transactions almost every large centre

has its own local tael of varying value. Thus the Canton tael (Sze-ma ping) is the chief unit of value in the province of Kwangtung. It weighs 579·85 grains and is the heaviest commercial tael in the empire. But there are besides numerous local taels, e.g. the Kongmoon tael and the Sailam tael, which are of lower standard.

The 1-cent piece and the copper cash ($\frac{1}{10}$ cent) are the usual **copper coins**.

Silver coins consist of the dollar and its fractions—50, 20, 10, and 5 cent pieces. Dollars of the Canton and Hongkong mints and the Mexican dollar are the most reliable coins, though it must be remembered that provincial dollars are only accepted at a discount outside their own province. In certain ports, such as Swatow, Japanese *yen*, Indo-Chinese *piastres*, and Straits Settlements dollars are freely accepted. Of the smaller silver coins the Canton 20-cent piece is perhaps the most popular coin throughout Kwangtung; and next to it comes the Hongkong 10-cent piece.

Paper money. Kwangtung Government notes for 1, 5, and 10 dollars, and notes issued by the principal banks (e.g. The Hongkong and Shanghai Banking Corporation, Chartered Bank of India, Australasia and China, International Banking Corporation, Bank of Taiwan) for 1 dollar up to 500, have a very general circulation. Besides these the silver notes (for 1 to 1,000 dollars) issued by the chief silver houses in the large towns are accepted in their immediate district, but only circulate at a discount outside that radius.

Counterfeit coins. The cash has become so debased that it is not worth counterfeiting. A flourishing business, however, is done in counterfeiting silver coins, chiefly Mexican or Hongkong dollars and Kwangtung 20-cent pieces.

Banks

There are no foreign banks in Kwangtung outside the concessions and settlements.

In Shameen the following banks exist:

Hongkong and Shanghai Banking Corporation.

Chartered Bank of India, Australia, and China.
International Banking Corporation of New York.
Deutsch-Asiatische Bank.
Mitsui Bussan Kaisha (Sam-ching-kung-ssu).
Bank of Tai-wan (Japanese).
Banque de l'Indo-Chine.

In Swatow :

Bank of Tai-wan (Japanese).

In Macao :

Banco Nacional Ultramarino.

The following are the chief Chinese banks in Canton :

Ta-ching Government Bank.
Tai-shun (does not issue notes).
Pak-chun-t'ung.

These conduct business on European lines. Native transmitting agencies, which are as a rule reliable, are very numerous.

Weights and Measures

The Chinese weights and measures are even more arbitrary and perplexing than their currency. It is true that a system of relative values exists which is of some use to the foreigner in commercial transactions; but the value of the several units varies considerably both according to locality and also to the material in which the transaction is made.

The following table gives the relative values of the chief weights and measures with their nominal equivalents in English terms. A few of the local variations of Kwangtung are added in the commentary.

Weights

		Approximate equivalents in English.
10 fên (candareen)	= 1 ts'in (ch'ien)	
10 ts'in (mace)	= 1 leung (liang)	= 583·3 grs. = 1⅓ oz. av. = 37·783 grammes.

		Approximate equivalents in English.
16 leung (tael)	= 1 kên (chin)	= $1\frac{1}{3}$ lb. av. = 604·53 grammes
100 kên (catty)	= 1 tam (tan or picul)	= $133\frac{1}{3}$ lb. av. = 60·453 kilog.

Capacity

10 kop (ko)	= 1 shing (shêng)	= 1·813 pints.
10 shing	= 1 tao (tou)	= 2·26 gallons.
10 tao	= 1 shek (shih)	

Length and distance

10 ts'un	= 1 ch'ek (ch'ih)	= 14·1 in. = 358 mm.
10 ch'ek	= 1 cheung (chang)	= 11·9 ft.
5 ch'ek	= 1 pou (pu)	= 5 ft.
360 pou	= 1 lei (li)	= 2,115 ft.

Area

25 ch'ek	= 1 pou	= 4·8 sq. ft.
24 pou	= 1 fên	= 33·6 sq. yds.
10 fên	= 1 mao (mou)	= $\frac{1}{6}$ acre.
100 mao	= 1 k'ing (ch'ing)	= 15·13 acres.

Weights.—At Swatow for general purposes 1 kên (chin) = $1\frac{1}{3}$ lb., but in measuring bean-oil and bean-cake 1 kên = $1\frac{2}{3}$ lb., and in measuring sugar 1 kên = $1\frac{21}{29}$ lb.

Capacity.—At Canton in general 1 *tao* or *tau* = 2·26 gallons. At Swatow two standards are used

(1) Ching-fu-tau = 2·74 gallons.
(2) Ching-hai-tau = 2·85 „

For measuring certain agricultural products, such as grain, bamboo tubes (*tung*) are commonly used. At Swatow these tubes are of 4 sizes, $\frac{1}{10}$, $\frac{2}{10}$, $\frac{5}{10}$, 1 *tung*, 20 *tung* being equal to 1 Ching-fu-tau and 21 *tung* to 1 Ching-hai-tau. There is also an official measure of capacity (*tau*) shaped like the frustum of a pyramid, which is equal to 1·13 gallons.

Length and distance.

At Canton, the tailor's *ch'ek* (*ch'ih*)	=	14·8 in.
the carpenter's ,,	=	12·7 ,,
,, merchant's ,,	=	14·1 ,,
At Swatow, the *ch'ek* in general use	=	12·7 ,,
the cloth or dry goods' *ch'ek*	=	14·7 ,,
,, carpenter's *ch'ek*	=	12·7 ,,
At Shiuhing, the carpenter's *ch'ek*	=	14 ,,
,, mason's *ch'ek*	=	13·6 ,,

With regard to the lei (or li), the usual measure of distance, it is not so much a linear measure as an expression of the distance which a loaded coolie will travel in a given time. On a level road this is about 10 li per hour (or approximately 10 li = 3 miles), but in hilly country it would be considerably less.

Area.—The standard *mao* (*mou*) used in measuring land = $\frac{1}{6}$ acre at Peking; but in Kwangtung 4·76 *mao* = 1 acre.

APPENDIX V

BIBLIOGRAPHICAL NOTE

THE following are among the books and maps which have been most frequently consulted in preparing this volume :

(A) Official works.

Military Report on Kwangtung.
Report on the Island of Hainan by Acting-Consul G. W. Pearson, 1911.
Chinese Maritime Customs, Decennial Reports and Returns of Trade.
Chinese Postal Guide, 1918.
Diplomatic and Consular Reports.
China Sea Pilot, vol. iii.

(B) Unofficial works.

Henry, B. C., *Lingnam*, London, 1886.
Colquhoun, A. R., *Across Chrysê*, London, 1883.
Madrolle, Guides, *Chine du Sud*, 1916.
Madrolle, C., *Étude sur l'île de Hainan* (Bulletin de la Soc. de Géog., vol. xix, 2e Trim., Paris, 1898) ; *Hainan, le pays et ses habitants* (Bull. du Comité de l'Asie française, Paris, 1909).
Mayers, W. F., *Historical and statistical sketch of the Island of Hainan* (Journal of N. China Branch of R. As. Soc., N.S., no. vii, 1873).
Diehr, M., *Bericht über eine Reise in das Innere der Insel Hainan* (Mitteilungen des Seminars für Orientalische Sprachen, Berlin, 1908).
Ritter, F., *Die Insel Hainan* (Deutsche Rundschau für Geographie und Statistik, vol. iii, 1885).
Jeremiassen, C., *Hainan* (Bull. de la Soc. Géog., Geneva, 1899).
Swinhoe, R., *Narrative of an exploring visit to Hainan* (J.N.C.B.R.A.S., N.S., no. vii, 1873).
Taintor, E. C., *Geographical Sketch of the Island of Hainan*, Canton, 1868.
Hirth, F., *The Peninsula of Lei-chou* (China Review, vol. ii).
Giles, H. A., *From Swatow to Canton overland*, Shanghai, 1874.
Ray, H. W., *A Short Geography of Kwangtung*, Hongkong, 1906.
Richard, L., *Comprehensive Geography of the Chinese Empire*, Shanghai, 1908.
Faber, E., *Chronological Handbook of the History of China*, Shanghai, 1902.

Li Ung Bing, *Outlines of Chinese History*, Shanghai, 1914.
Macgowan, J., *A History of China*, London, 1897.
Playfair, G. M. H., *The Cities and Towns of China*, Shanghai, 1910.
Giles, H. A., *Chinese Biographical Dictionary*, London, 1898.
Tchang, M., *Synchronismes chinois*, Shanghai, 1905.
Wieger, L., *Textes Historiques*, 1903–5.
Yang ch'êng ku ch'ao, 1806.
Kuang tung t'ung chih, 1822.
An Official Guide to Eastern Asia, vol. iv, *China*, Tokyo, 1915.
The China Year Book, London, 1916.

(C) Maps.

I. General.

Admiralty Charts.
Chinese Map of Kwangtung, 1879.
Provisional Map of the Province of Kuang-Tung (northern portion), 1911.
Dingle and Fruin's New Map of China, with index.
China Postal Album.
French 1 : 1,000,000 maps of Kwangtung (3 sections).

II. East Kwangtung.

Map of Wing-ting District (Chinese and English).
Map of Kityang District (Chinese and English).
War Office Sketch Maps :
- Route Hoifung–Waichow–Tamshui–Lungkong.
- Kityang to Lukfung and Hoifung.
- Waichow to Mirs and Bias Bays.
- Coast from Hongkong to Swatow.
- Proposed Railway Route from Canton to Swatow (Chinese and English).
- Tutung to Waichow.
- East River, Waichow–Lungchün (2 sections).
- Lungchün to Kailiang.
- Chonglok River, Kailiang–Hohow, and Mei River to Cha-hang-sz.
- Mei River, Cha-hang-sz to Samhopa.
- Survey of East River, Sheklung–Waichow.
- Rough Sketch of New Channel below Sheklung.

III. Canton Delta and West River.

Marsh Brown, Map of Canton Delta.
War Office Sketch Maps :
- Whampoa Section of Canton River.
- Lokyum to Howlik.
- Howlik to Wongkonghü.
- Lokyum to Wongkonghü.
- Takhing to Yungtong.

IV. North Kwangtung.

War Office Sketch Maps :

Yueh-Han Railway, Canton-Hotow.
Yueh-Han Railway, Wongsha-Hotow.
Yueh-Han Railway, Shiuchow-Pingshek.
Canton to Yuentam.
Northern Environs of Canton (3 sheets).
Canton-Samshui Railway.
Canton-Hankow Railway.
North River from Samshui to Shiuchow.

V. West Kwangtung.

Carte Chinoise : Côte du Quantong, in 3 sections : Tonghing-Pakhoi, Luichow Peninsula, Kochow.
French Map of West Kwangtung and Hainan.
French Map of the Gulf of Tonkin.
War Office Sketch Maps :
Kwangtung Coast from Onpo to Moncay.
Shuitung-Kochow-Fachow-Shekshing-Limchowfu.
Limchowfu to Namheung.
Pakhoi.
Postal Map of the District north of Pakhoi.

VI. Hainan.

French Map of Hué and Hainan.
Hainan : Division Administrative.
War Office Sketch Maps :
Hoihow and Kiungchow.
Delta of Po-chung River.
Hoihow to Kachek via Dengan.
Kachek to Vanchiu.
Kachek to Hoihow via Vunsio.
Courier Routes in Hainan.
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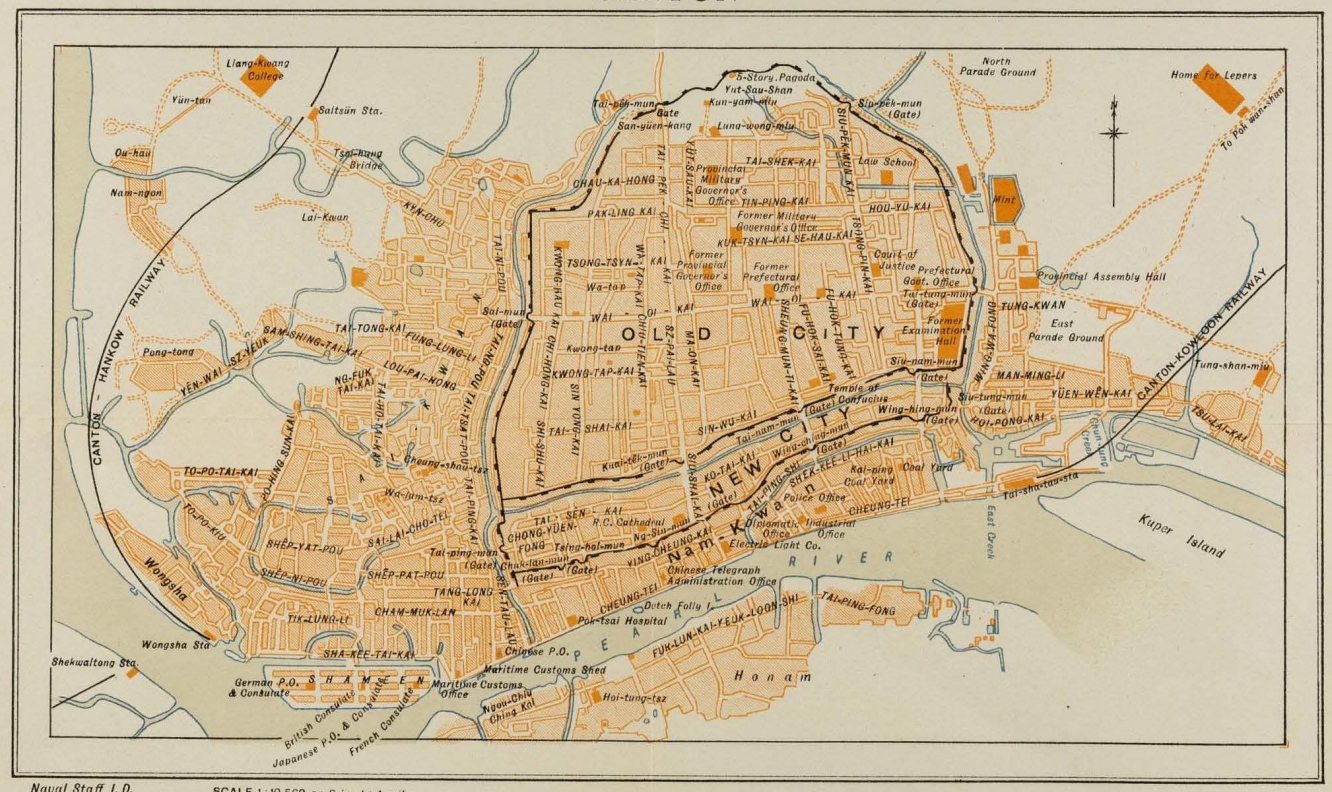
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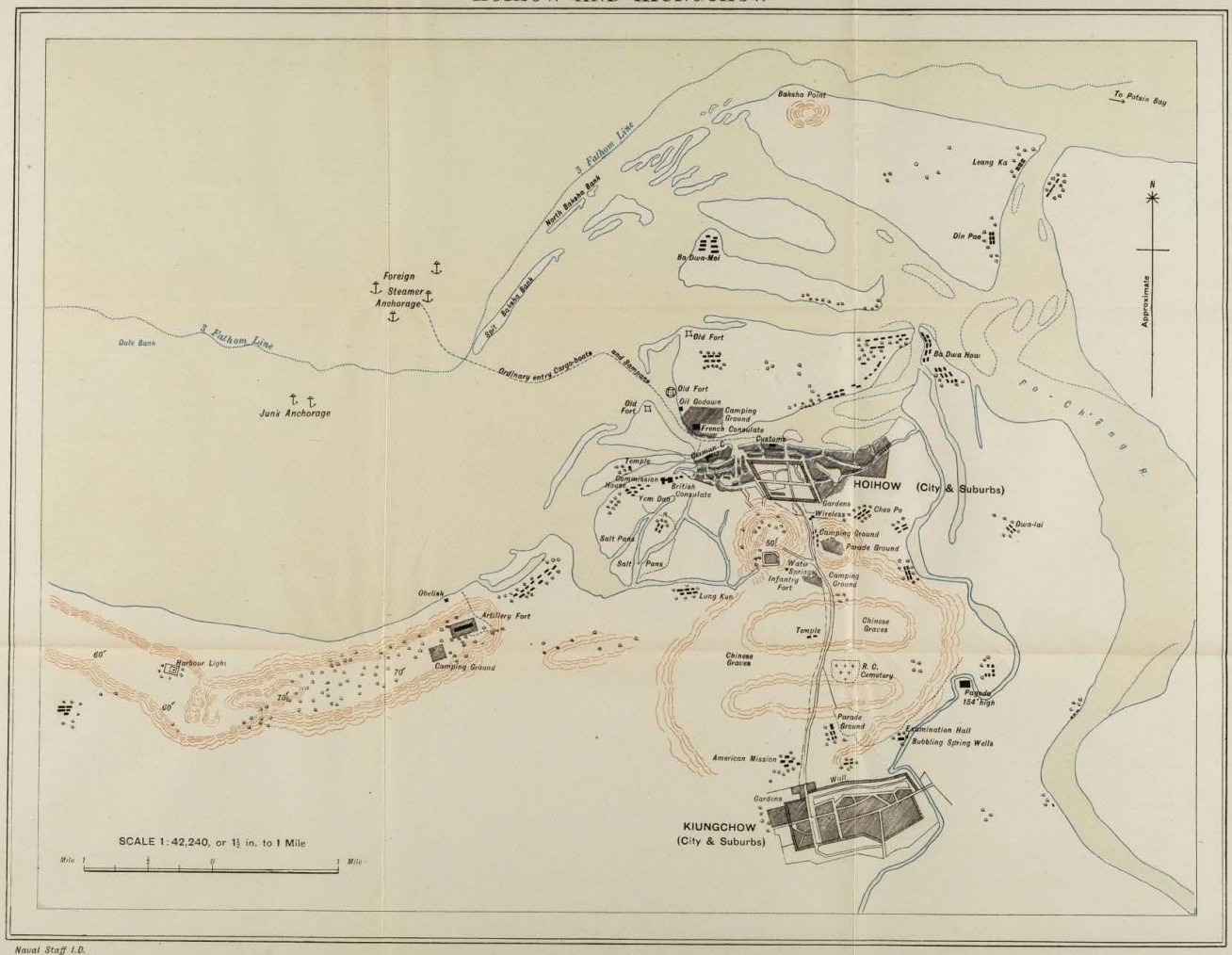
PROVINCE OF KWANGTUNG



CANTON

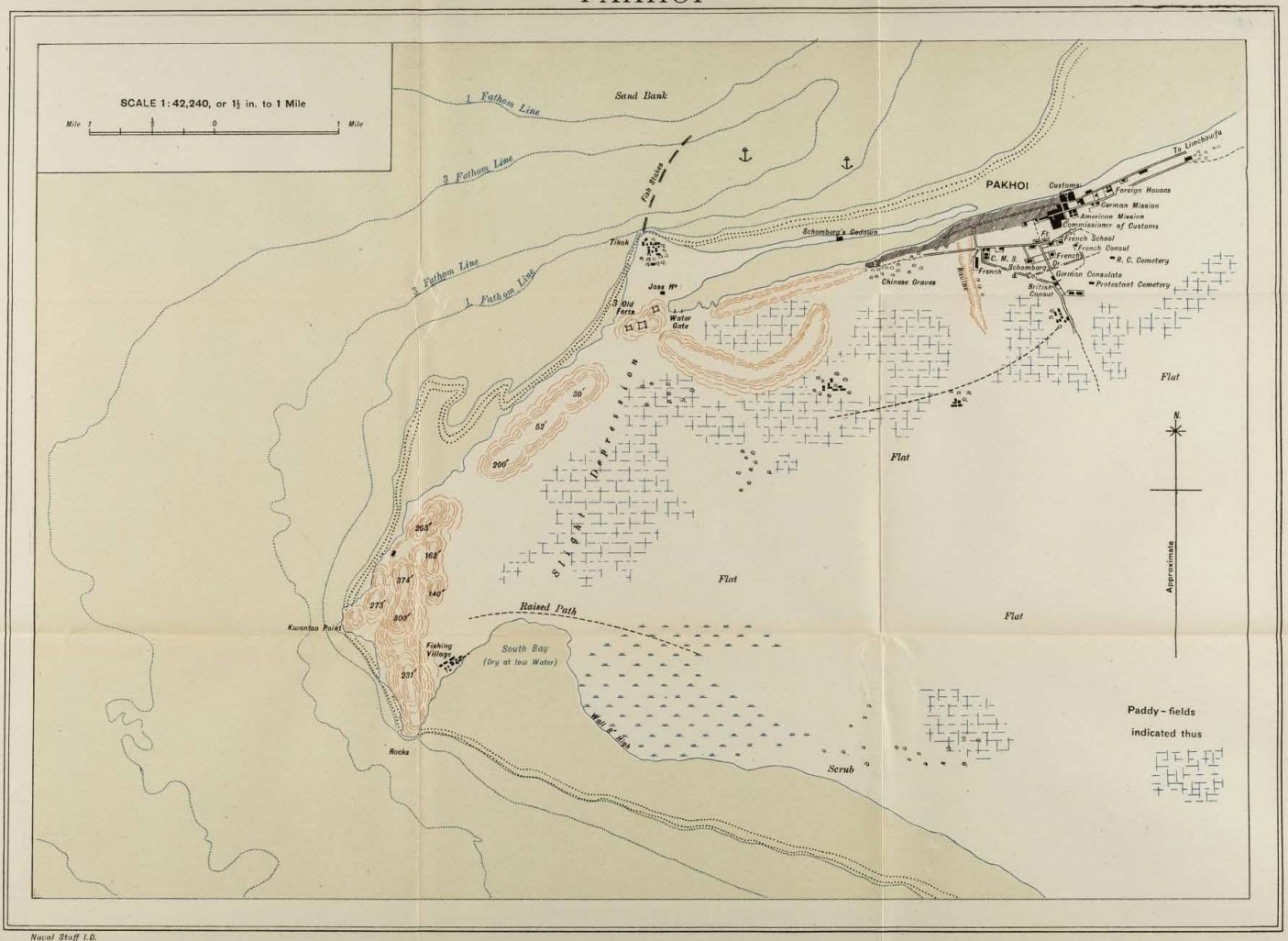

Liang-Kwang College
Yün-tan
Saitsün Sta.
Tsai-hung Bridge
Ou-hau
Nam-ngon
Lai-Kwan
CANTON - HANKOW RAILWAY
Pong-tong
YEN-WAI
SZ-YEUK
SAM-SHING-TAI-KAI
TAI-TONG-KAI
FUNG-LUNG-LI
NG-FUK TAI-KAI
LOU-PAI-KONG
TAI-PO-TAI-KAI
PO-HING SUN-KAI
TO-PO-KU
Wongsha
SHEP-YAT-POU
SHEP-NI-POU
SAI-LI-CHO-TEI
Wa-lam-tsz
Cheung-shau-tsz
TAI-PING-KAI
Tai-ping-mun (Gate)
SHEP-PAT-POU
TANG-LONG KAI
TIK-LUNG-LI
CHAM-MUK-LAN
Wongsha Sta.
Shekwaltong Sta.
SHA-KEE-TAI-KAI
German P.O. & Consulate
SHAMSEEN
British Consulate
Japanese P.O. & Consulate
French Consulate
Maritime Customs Office
Chinese P.O.
Maritime Customs Shed
Ngow-Chiu Ching Kai
Hoi-tung-tsz
SEA
Honam
Pok-tsai Hospital
Dutch Folly
CHEUNG-TEI
FUK-LUN-KAI-YEUK-LOON-SHI
TAI-PING-FONG
Chinese Telegraph Administration Office
Nam-Kwan
RIVER
Electric Light Co.
Dynamatic Industrial Office
Police Office
Kai-ping Coal Yard
CHEUNG-TEI
Tai-shu-tau-sta
East Creek
Kuper Island
Canton Reclamation
NEW CITY
OLD CITY
Tai-nam-mun (Gate)
Wing-chun-mun (Gate)
KO-TAI-KAI
SHEK-KEE-LI-HAI-KAI
SIN-SHAI-KAI
Kuai-tek-mun (Gate)
SIN-WU-KAI
Temple of Confucius
Wing-hing-mun (Gate)
KOI-PONG-KAI
Siu-tung-mun (Gate)
YÜEN-WÊN-KAI
MAN-MING-LI
Tung-shan-miu
TSUI-KAI-TAI
CANTON-KOWLOON RAILWAY
Siu-nam-mun (Gate)
WING-WA-FONG
TUNG-KWAN
East Parade Ground
Former Examination Hall
Tai-tung-mun (Gate)
Provincial Assembly Hall
Prefectural Govt. Office
Court of Justice
Former Prefectural Office
Former Provincial Governor's Office
TSONG-TSYN-KAI
WAI-TAP-KAI
CHU-TIEN-KAI
Kwong-tap
KWONG-TAP-KAI
SIN-HONG-KAI
SHI-SHU-KAI
TAI-TONG-SHAI
SHAI-KAI
SZ-PAI-LAU
MA-ON-KAI
WAI-OI KAI
FU-HOI-TUNG-KAI
SHEUNG-WUH-TI-KAI
TSONG-PIN-KAI
HOU-YU-KAI
Former Military Governor's Office
KUK-TSYN-KAI SE-HAU-KAI
TAI-SHEK-KAI
Provincial Military Governor's Office
TIN-PING-KAI
PAK-LING KAI
CHI-TAI-KAI
OHAU-KA-HONG
Law School
Mint
Sip-bek-mun (Gate)
SIU-PEK-MUN-KAI
5-Story Pagoda
Yut-Sau-Shan
Kun-yam-miu
Luna-wong-miu
San-güen-kang
Tai-bek-mun Gate
North Parade Ground
Home for Lepers
To Pok-wan-shan
KWAI-CHAU
Sai-mun (Gate)
TAI-NGOU
TAI-HOI-TAI-KAI
TAI-HOI-KAI
CHONG-YÜEN-FONG
Tsing-hai-mue
Chak-tan-mun (Gate)
TAI-SEN-KAI
R.C. Cathedral
Ng-Siu-mun
VING-CHEUNG-KAI
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SCALE 1:10,560 or 6 in. to 1 mile
100 0 100 200 300 400 500 600 700 800 900 1000 Yards
0 ¼ ½ Mile
100 0 100 200 300 400 500 600 700 800 900 1000 Metres

HOIHOW AND KIUNGCHOW



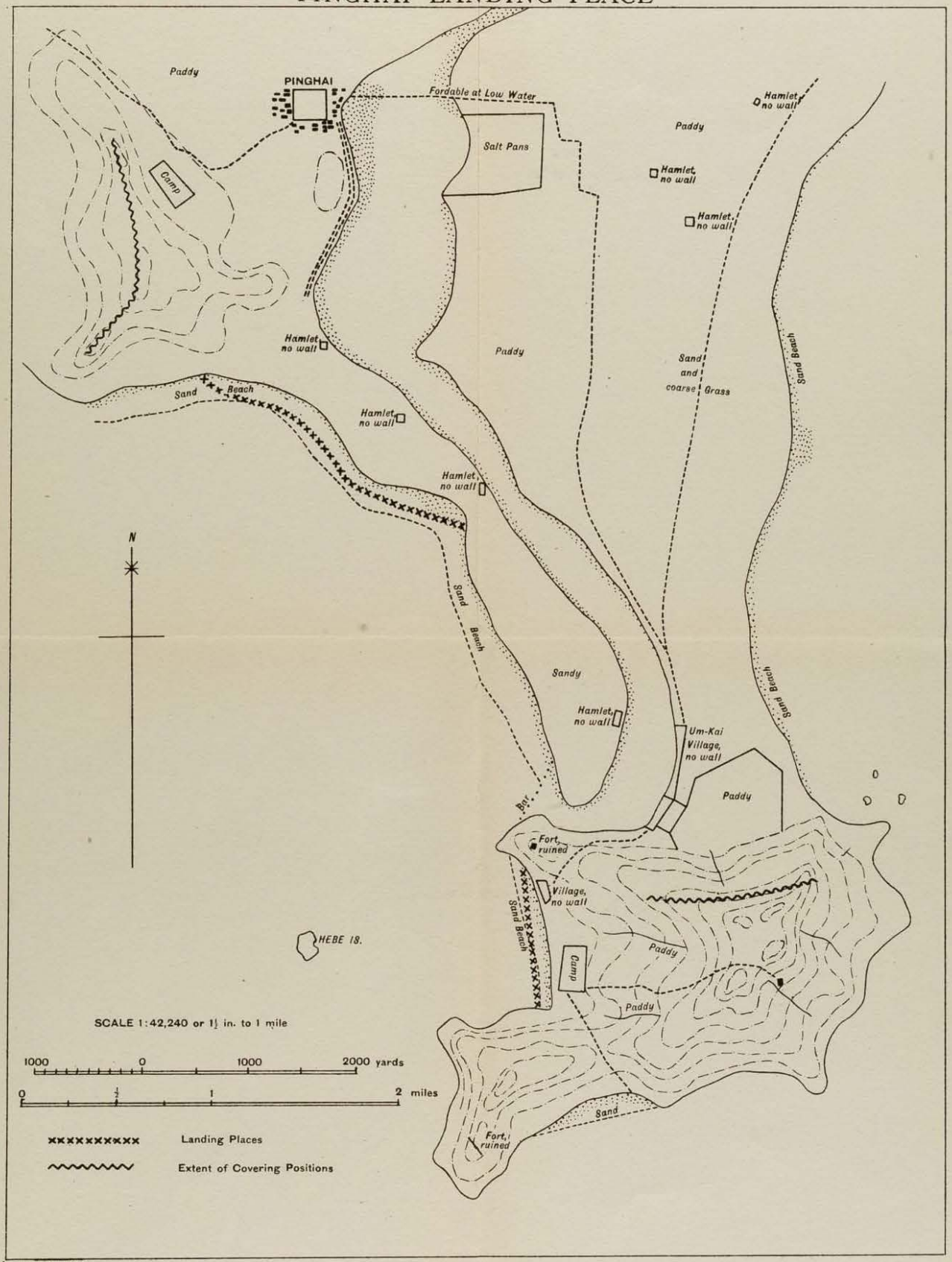
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PAKHOI

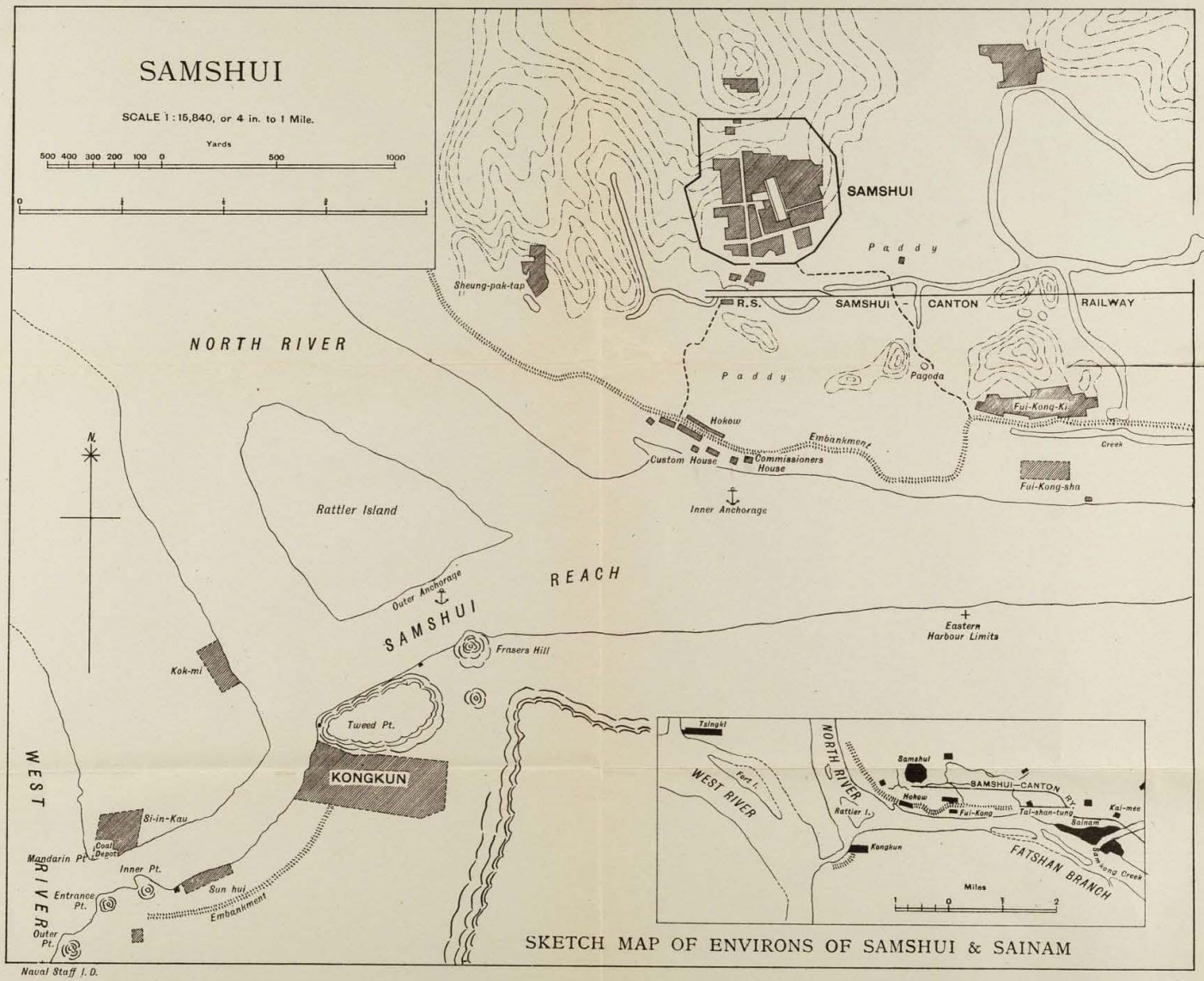


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PINGHAI LANDING PLACE

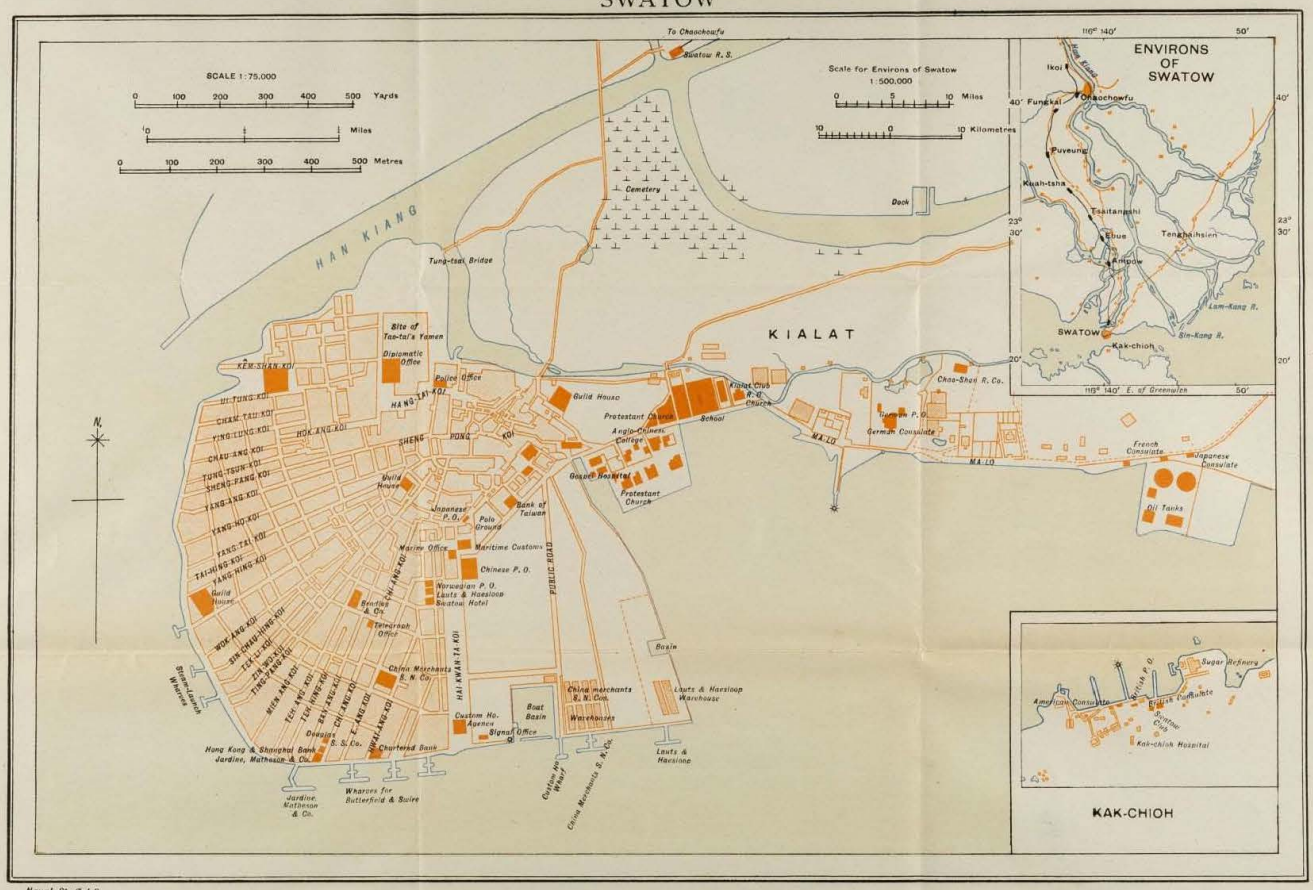


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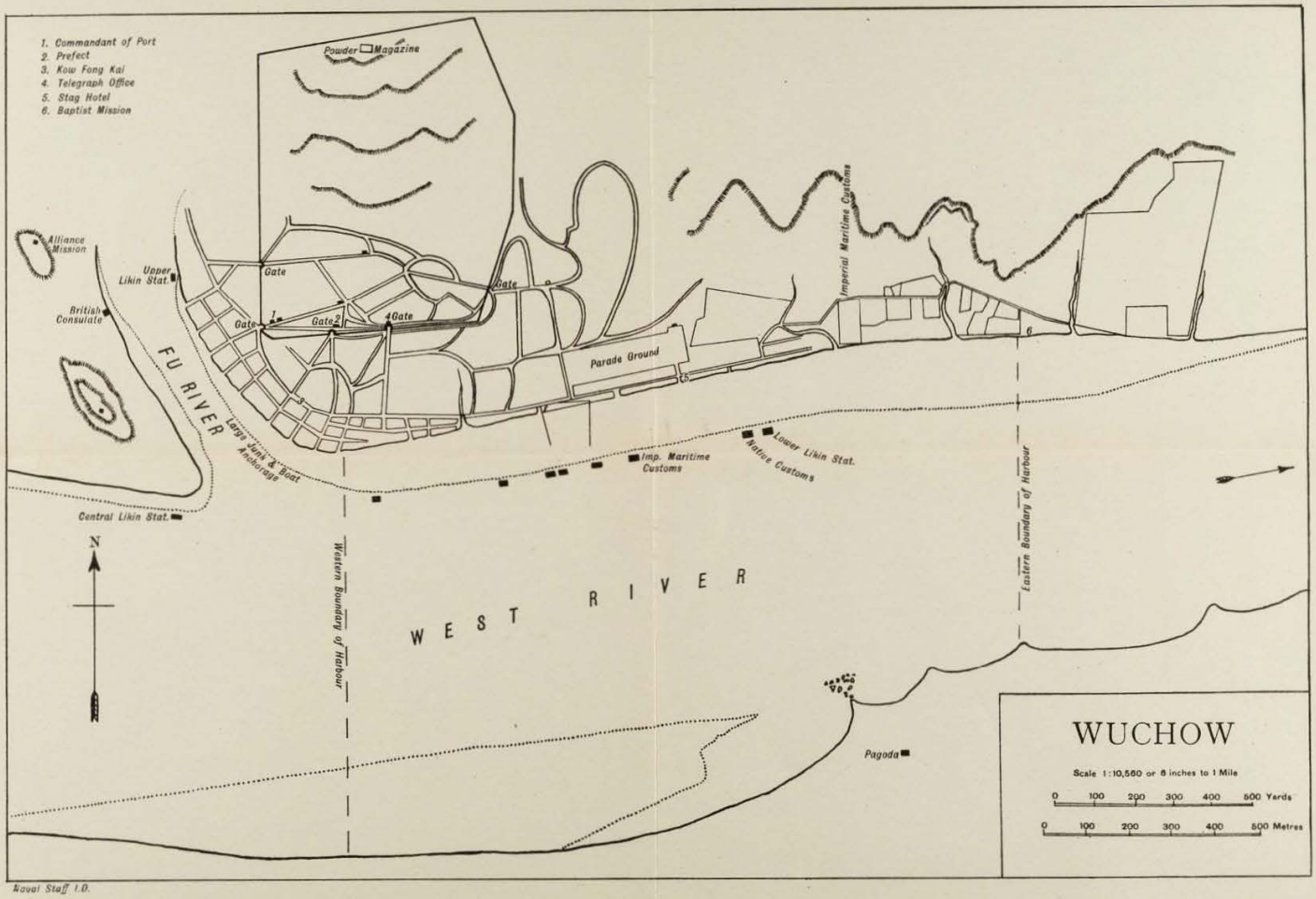


SKETCH MAP OF ENVIRONS OF SAMSHUI & SAINAM

SWATOW



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